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ABSTRACT

A comprehensive summary of postsecondary educational opportunities in Ontario is presented to assist students in choosing a course of study. After presenting information on student costs and student financial assistance, general information on Colleges of Applied Arts and Technology is provided. For each college, apprenticeship programs, regular programs, and short programs are identified. An index of programs is included. Profiles of each college are also provided that include enrollment data, program descriptions, and information on alternative learning opportunities. Additionally, an overview of apprenticeship programs and descriptions of specific trades are presented. General information on Ontario universities, a chart of study programs available at Ontario universities, and profiles of each institution are included. The profiles include information on admission requirements, degrees offered, tuition and fees, financial assistance, and enrollments. Profiles are also provided for other postsecondary education institutions (e.g., chiropractic colleges, agricultural technology colleges, hospital programs, business institutes, and art colleges). Finally, correspondence study programs, facilities for disabled students, native studies, private vocational schools, and study opportunities for senior citizens are covered. (SW)

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Horizons 1984-85

A guide to post-secondary education in Ontario

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Ontario

Ministry of Colleges and Universities

Hon. Bette Stephenson, M.D., Minister
Harry K. Fisher, Deputy Minister

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Horizons
1984-85

As you look to your future beyond secondary school, you may feel somewhat apprehensive about the wide range of educational opportunities available to you in Ontario.

Horizons has been prepared by the Ministries of Education and Colleges and Universities to help you to make the educational decisions now which will have such an important effect in the years ahead.

These decisions aren't easy, but you can draw some comfort from the knowledge that your predicament is not unique; many others have had to make the same difficult choices. There are no simple answers to the question "What am I going to do with the rest of my life?"

In making those choices, however, I would suggest that you follow the still valid admonition to "Know thyself".

The achieving of an apprenticeship certificate, a university degree or a community college diploma are all equally worthwhile educational goals. Each offers special rewards which are not provided by the others.

Your responsibility is to choose the course of action that is right for you, which exploits your individual talents and skills, and which satisfies your interests and goals.

Horizons is a comprehensive summary of post-secondary educational opportunities which will assist you in choosing a course from the many which are available.

The Government of Ontario is also prepared to assist you in continuing your education if you lack the financial resources to do so on your own. In 1983-84 the Ontario Student Assistance Program will receive funding of $119.4 million, almost double the amount available in 1980-81. About 90 000 students receive assistance from OSAP each year.

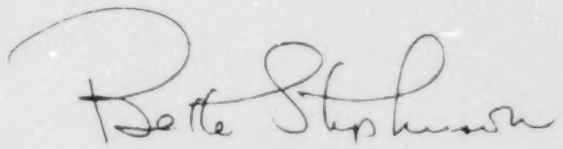
But the primary responsibility for your education still rests with you.

Ultimately only you can make the commitment to further your education, based upon the advice and encouragement of parents, teachers and friends. You must remember, however, that education does not occur only within the walls of a classroom or lecture hall. Continuing education is provided in Ontario through correspondence courses, on-the-job training, upgrading, refresher courses, and many other approaches.

Whatever means you choose, you will learn that the process of education and personal growth never ends – it moves steadily onward with occasional changes in direction.

At this stage in your life, you have the opportunity to accelerate that process by continuing your studies in an educational system whose only purpose is to help you achieve your full potential. This opportunity may never again be so easily pursued, so please consider your options carefully and choose wisely.

Good luck!



Bette Stephenson, M.D.
Minister of Education
Minister of Colleges and Universities

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Note:
With reference to admission requirements for post-secondary programs

OSSGD = Ontario Secondary School Graduation Diploma (completion of 27 credits meeting Ministry of Education requirements)

OSSHGD = Ontario Secondary School Honour Graduation Diploma (completion of six credits at the grade 13 level)

The information in this edition was revised March, 1983. As some changes in courses and admission requirements may be made during 1984, students planning to attend college or university in 1984-85 are advised to consult their guidance counsellors and check the official calendars of post-secondary institutions in which they are interested.

Information on post-secondary courses offered in French is summarized in *Tour d'horizon* which is distributed to all francophone and bilingual secondary schools.

Copies of *Horizons* and of *Tour d'horizon* can be obtained free of charge by writing to or telephoning:
Communication Services Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2
Telephone (416) 965-6407

Students' Costs

Total Costs

Total costs for an eight-month academic year at a post-secondary institution may vary from approximately $2 000 for a student living at home and attending a college of applied arts and technology (CAAT) to approximately $5 500 or more for a university student living on campus or boarding away from home.

Annual Tuition Fees

University tuition or academic fees may usually be paid in two instalments in September and January. CAAT fees must generally be paid in one instalment. When accepting an offer of admission by a college of applied arts and technology, applicants are required to send a non-refundable confirmation fee which is deducted from the full tuition fee. Some universities also require a deposit on tuition fees for limited-enrolment programs.

The figures below show the range of full-time, undergraduate, annual fees for different subject areas for the 1983-84 academic year. In most instances, incidental fees are included. Specific fees are listed under individual universities and colleges. All fees are approximate and subject to change without notice.

University Degree Programs – Annual Fees (including incidental fees)

arts	$1 100 – $1 400
commerce	$1 100 – $1 400
dentistry	$3 608 – $3 940
education	$1 100 – $1 230
engineering	$1 306 – $1 550
law	$1 214 – $1 270
medicine	$1 500 – $2 180
nursing	$1 100 – $1 260
physical education	$1 100 – $1 250
science	$1 195 – $1 275

Other Institutions – Annual Fees

Ontario College of Art	$1 004
Community colleges (two terms)*	$520
Regional Schools for Nursing Assistants	$315
Royal Military College	$800
Ryerson Polytechnical Institute	$907.50

*Fees may vary according to length of program.

Foreign Student Fees

The policy of the Ontario government is that foreign students should pay a higher proportion of the cost of their education than Canadian students. Tuition fees for foreign students are therefore higher than for Canadians.

Certain foreign students are exempt from the higher fee including diplomatic and consular officials and their dependents, children of persons admitted to Canada for the purpose of engaging in employment, Convention refugees, students sponsored by the Canadian International Development Agency, and students studying in Canada under eligible cultural exchanges. Students who are unsure about their status in this matter or who want more information are urged to contact the institution to which they are applying.

Tuition fees for foreign students registering in most programs at the colleges of applied arts and technology are $4 320 per two-term academic year.

As the universities are autonomous in the area of determining the fees charged to their students, the final decision on the fees for foreign students is left to the Board of Governors. Generally, university foreign student fees range from $3 780 – $6 160 (per two-term academic year) for new registrants, depending on the institution and program chosen. However, students are cautioned to check with the individual institutions for details on the actual fees charged to foreign students.

Transportation

At least $33 a month should be added to the living expenses of the student who cannot walk to classes. This figure will vary according to the public transportation rates, car pool arrangements, and parking fees.

Books and Student Supplies

CAAT and university students usually need $240 to $600 per year for books and supplies. Students in specialized or professional university courses such as architecture, dentistry, and medicine, or in CAAT programs such as photography, cinematography, advertising, and graphic arts, may require additional funds for the purchase of books, instruments, and supplies.

Incidental Fees

The tuition or academic fees at most universities include an incidental fee to cover such costs as the use of sports facilities, student council fee, health service contribution, registration fee, etc. At other post-secondary institutions, the incidental fee is levied separately. Tuition related incidental fees (laboratory shop costs, manadatory field trips etc.) are

included in the standard tuition fee for colleges. Student activity fees for college students are collected as separate mandatory fees. Specific information may be obtained from the calendars of the universities and colleges.

Application and Examination Fees
Students wishing to enter university in any year are required to submit their application to the Ontario Universities' Application Centre. A $9 fee must accompany the common application form when submitted. For further information, please see page 73.

Students wishing to apply to colleges of applied arts and technology are not required to submit an application fee. However, some institutions require a fee from students writing special examinations; for further information, contact your secondary school guidance counsellor or the CAAT.

Health Insurance
If your parents have Ontario health insurance, you are covered as their dependent only until you become 21, marry, or take regular employment. The monthly premium for a single person is $28.35 and for a family, $56.70. However, premium assistance is available to single persons with a taxable income of $3 000 or less in the current year, and families with an estimated taxable income of $3 500 or less. If you are not covered by an existing health plan or require health insurance information, contact the
Ontario Health Insurance Plan
P.O. Box 38
Kingston, Ontario K7L 5J2
Telephone (613) 547-3447

Board and Lodging
All Ontario universities and some CAATs in Northern Ontario have residence facilities. Depending on meal plans and occupancy, residence costs range from approximately $2 000 to $2 700 or over for an academic year. Specific costs are listed under the individual universities in *Horizons* and in university calendars. Students who choose board and lodging should allow at least $85 a week to cover these costs. All institutions maintain a housing registry which lists available accommodation in the area.

Miscellaneous Expenses
In addition to the basic student costs of board and lodging and tuition fees, there are incidental expenses which you must consider in your estimate of the annual cost of a year at a university or college. You should allow a weekly average of about $18 for miscellaneous items such as laundry, personal needs, and entertainment.

Financial Assistance for Students

Students who need financial assistance to attend a university, college of applied arts and technology (CAAT), or other post-secondary institution may be able to obtain it from government or private sources.

A number of corporations, veterans' organizations, and service clubs offer scholarships for general academic excellence or excellence in particular subjects, and most universities have entrance scholarships for outstanding scholars. Information on these bursaries and scholarships should be available from your guidance office or from university and CAAT calendars and financial aid offices.

About two of every five full-time students at Ontario's CAATs and universities receive government financial aid. The Ontario government administers the federal and provincial student assistance programs outlined below.

Ontario Student Assistance Program (OSAP)
OSAP is intended to help students who need money for post-secondary education. Academic excellence is not a qualification, although students are expected to progress satisfactorily in their studies. OSAP funds supplement, but do not replace, a student's own financial resources and those of his or her immediate family.

OSAP comprises four plans:
- Ontario Study Grant Plan,
- Canada Student Loans Plan,
- Ontario Student Loans Plan,
- Ontario Special Bursary Plan.

The main features of the program are summarized below. Full information is contained in the brochure *Ontario Student Assistance Program 1983-84*, which you may obtain from your guidance counsellor, from the financial aid administrator at the institution you are planning to attend, or from the Ministry of Colleges and Universities (address at the end of this section). Brochures describing OSAP for the 1984-85 academic year and application forms will be distributed to all Ontario secondary schools in the spring of 1984.

You can use the same application form to apply for an Ontario Study Grant, a Canada Student Loan, and an Ontario Student Loan. When your application is processed, the Ministry first evaluates the amount of grant that you may receive from the Ontario Study Grant Plan. The Ministry then considers your eligibility for loan assistance. You may decide for yourself how much of this additional loan assistance you wish to accept.

A separate application for the Ontario Special Bursary Plan, described below, is available from the Ministry of Colleges and Universities.

Eligibility
To qualify for OSAP assistance, you must be a Canadian citizen or permanent resident and meet Ontario's residency requirements.

You may qualify for grant and loan assistance from OSAP if you plan to attend one of the following institutions in Ontario:
- a college of applied arts and technology,
- a university,
- a college of agricultural technology,
- a regional school for nursing assistants,
- some registered private vocational schools,
- most hairstyling schools (Canada Student Loans only),
- Canadian Memorial Chiropractic College,
- Dominican College of Philosophy and Theology,
- Ontario Bar Admission Course,
- Ontario College of Art,
- Niagara Parks Commission School of Horticulture,
- Royal Conservatory of Music,
- Royal Military College (Canada and Ontario Student Loans only),
- Ryerson Polytechnical Institute,
- Toronto Institute of Medical Technology.

Outside Ontario, you may qualify for grant and Canada Student Loan assistance if you plan to attend any university or approved college of applied arts and technology in Canada or a Canadian military college. Ontario Student Loan assistance is available only if you plan to study in Ontario.

Ontario residents who wish to attend public or private post-secondary institutions elsewhere in the world, may be eligible to receive loans through the Canada Student Loans Plan (CSL), but will not be eligible for grants.

OSAP requires that you enrol in a program leading to a degree, diploma, or certificate. You may be eligible for a Canada Student Loan if your program of study lasts at least 12 weeks in one academic year and is a minimum of 60 per cent of a full course load. For the Ontario Study Grant Plan, your program must last at least 10 weeks and for the Ontario Student Loans Plan, at least four weeks.

The Ontario Study Grant Plan and the Ontario Student Loans Plan require that you take at least 20 per cent of a full course load in order to apply for assistance. You can be either a full- or part-time student.

Calculating your Financial Need
Under both the grant and loans plans, your financial need is calculated by subtracting your expected financial contribution from allowable educational expenses. You will receive financial assistance if these educational expenses are more than the amount of money that you or you and your family are expected to contribute toward these expenses. However, if your expected financial contribution is equal to or more than the costs of your post-secondary education you will not receive any financial assistance from OSAP.

Allowable Educational Expenses
Allowable educational expenses include the actual or estimated costs of the following items, as determined by the institution you are planning to attend and approved by the Ministry:
- tuition and compulsory fees,
- books and equipment,
- personal and living expenses,
- return trip home each year, and
- local transportation.

Expected Financial Contribution
Depending upon your circumstances, your expected financial contribution may include amounts you are expected to have saved from summer or work-term earnings, or include a contribution from your earnings from part time work after enrolment. Academic awards, government income, investment, and other income, and a contribution from assets may also be considered as financial resources.

In addition, if you are just leaving secondary school and applying for assistance to attend a post-secondary educational institution, your parents are likely to be expected to contribute to your basic educational costs, according to their financial resources. To determine their contribution, an objective assessment is made of your parents' income, and allowances are made for their basic expenses and the number of their dependents. A contribution from parents' net assets may also be considered as a financial resource.

Loan and Grant Assistance
Loans are usually interest free until six months after you cease to be an eligible student. Ontario Study Grants do not normally have to be repaid.

Applicants eligible for grants and loans may receive assistance up to the amount of their financial need subject to the maximums under each plan. Under the Canada Student Loans Plan, applicants may obtain a maximum of $56.25 per week of their study period. The following table illustrates how this maximum is applied:

Length of Program (weeks)	CSL Maximum
12	$56.25/week
13 – 15	$900
16 – 25	$56.25/week
26 – 31	$1800
32 – 52	$56.25/week

Under the Ontario Student Loans Plan, applicants may be eligible to receive up to $900 per term.

Where, When and How to Apply for Financial Assistance
If you are planning to attend an Ontario college or university or one of the other Ontario institutions listed above, you can get your OSAP application form directly from your guidance office or the institution's financial aid office. To apply for assistance to attend any other post-secondary institution, you can obtain the necessary forms from the Student Awards Branch of the Ministry of Colleges and Universities (address at the end of this section). Please state the name of the institution you plan to attend when requesting your application form.

Mail your OSAP application to the financial aid office at the institution you plan to attend or take it to the office personally to be checked for completeness and accuracy. You can submit your application as soon as the forms are available, usually in April.

Your application should be submitted no later than July 1, in order to be processed for fall registration.

If you intend to enter a trimester or co-operative program, you should submit your application before the end of the first month of the semester to which the application refers.

To obtain further information about the Ontario Student Assistance Program, contact the financial aid office of the institution you hope to attend or the Student Awards Branch of the Ministry of Colleges and Universities.

Ontario Special Bursary Plan
The aim of the Ontario Special Bursary Plan is to encourage people in serious financial need to begin part-time post-secondary studies or take approved upgrading courses so that they may improve their training and skills in order to enhance their job opportunities. You may be eligible for a bursary if:
- you are a Canadian citizen or a permanent resident who has been in Canada as a permanent resident for twelve consecutive months;
- you have resided in Ontario for the twelve consecutive months immediately prior to the month in

which classes commence, not counting time spent as a full-time student;
- you are receiving social assistance, are unemployed, or have a low family income;
- you are taking or are intending to take:
  - credit courses (on a part-time basis) leading to a degree, diploma, or certificate; or
  - upgrading courses (either on a full- or part-time basis) offered by a college of applied arts and technology; or
  - in special cases, approved correspondence courses at certain institutions in Ontario; and
- you are registered or are intending to register at one of the following Ontario post-secondary institutions:
  - a college of applied arts and technology;
  - the Ontario College of Art;
  - a private vocational school approved for Ontario Special Bursary Assistance;
  - the Ryerson Polytechnical Institute; or
  - a university.

If you are eligible, you may receive a bursary to cover the costs of your tuition and other compulsory fees, books and equipment, and local transportation expenses. You may also receive a supplementary grant of $10 per week to help cover costs such as babysitting. The maximum amount of assistance per academic year is $1 200.

Fellowships and Bursaries for Second-language Study

There are a number of federal-provincial programs related to Canada's two official languages. These include:

- *Fellowships for Studying in French*

A program funded by the Secretary of State providing fellowships for the first year of study in any discipline taken in the French language at the graduate or undergraduate level in a French-language or bilingual Canadian university or college of applied arts and technology in Ontario, or in a French-language CEGEP in Quebec (professional program). Eligible students may receive up to $2 000 for their first year only of studying in French.

- *Teacher's Summer Bursary Program*

Programs are available for French-language teachers and teachers of French as a second language taking approved summer courses to improve the quality of their teaching. The programs provide bursaries of up to $1 060.

- *Bursary Program for Teachers in French-Language Instructional Units*

Bursaries of up to $300 are provided to certified teachers in French-Language Instructional Units to upgrade their basic qualifications and to acquire specialized skills during the winter months.

- *Summer Language Bursary Program*

This bursary program funded by the Secretary of State for summer language study gives institutions $1 150 to cover the cost of tuition and board and lodging for each student taking immersion courses in their second official language, either English or French.

- *Second-Language Monitor Program*

A program providing a maximum of $3 000 to selected full-time university students in Canada who work part-time in educational institutions as second-language monitors. This federal government program funded by the Secretary of State usually applies to monitors working and studying outside their home province.

Ontario Scholarships

Awards of $100 are made on the recommendation of secondary school principals to Grade 13 students who have an overall average of 80 per cent or better in six Grade 13 credits. Additional information may be obtained from your high school guidance office.

Further Information

For further information on any of these financial assistance programs, contact your guidance counsellor, financial aid administrator, or
Information Section
Student Awards Branch
Ministry of Colleges and Universities
8th Floor
Mowat Block, Queen's Park
Toronto, Ontario M7A 2B4
Telephone (416) 965-5241

If you are calling from outside Metropolitan Toronto you may call toll-free by dialing 1-800-268-3748.

Calls from communities within area code 807 may be placed by dialing 0 (zero) and asking for Zenith 47720.

Financial Support from the Federal Government
The Canada Employment and Immigration Commission (CEIC) provides financial support for participants in some college certificate and diploma programs, under the Canada-Ontario training agreement of 1982.

Support is available for training programs in occupations designated as being in national or provincial demand. To obtain financial support, participants must meet eligibility criteria established under the Canada-Ontario training agreement.

For those applicants who meet the eligibility criteria, the CEIC may provide income support – in the form of Unemployment Insurance benefits or a weekly allowance – and may pay for the persons' tuition.

Further Information
For further information on CEIC support, contact the local Canada Employment Centre (listed in the blue pages of the telephone book under "Government of Canada/Employment and Immigration Canada" or the college.

General Information on Colleges of Applied Arts and Technology

Ontario's colleges of applied arts and technology (CAATs) provide students the opportunity to develop the skills necessary to prepare for rewarding careers in business, the applied arts, technology, social services, and health sciences.

There are 22 CAATs with more than 90 campuses throughout the province serving all major economic regions of Ontario. During 1982-83, the CAATs had an enrolment of more than 76 500 full-time students in certificate and diploma programs, in addition to those attending college as part of their apprenticeship training. The number of part-time students was approximately 580 000.

The CAATs offer a variety of full-time and part-time career-oriented programs for secondary school graduates and for mature students who have not completed secondary school.

While there are exceptions, most college programs fall into two categories – diploma programs, which last two or three years, and certificate programs, which last less than one year. A "program" consists of a number of "courses", leading towards a diploma or certificate. For instance, a diploma program in mechanical engineering technology might include courses in mathematics, drafting, the mechanics of metals, machine tools, etc.

Some programs are offered on a part-time basis through a college's Continuing Education Division; students may complete courses leading towards a certificate or diploma during the evening or on weekends. Continuing education divisions also offer non-credit career-oriented courses and non-credit general interest courses.

To determine whether a particular program or course is offered through continuing education, contact the college.

General Admission Requirements/Diploma Programs

The following persons are eligible for admission to diploma programs:

- those who hold, at least, an Ontario Secondary School Graduation Diploma (OSSGD), obtained at the end of Grade 12 from any secondary school program.
- mature students who are 19 years of age on or before the date of commencement of the program in which they plan to enrol.

However, admission requirements vary from program to program; therefore, applicants should consult the calendar of the college they plan to attend. Calendars may be obtained from secondary school guidance offices or directly from the college registrar.

Students will be admitted to diploma programs in the following order of preference:

- permanent residents of Ontario
- permanent residents of other Canadian provinces or territories
- students from Commonwealth countries
- students from other countries.

General Admission Requirements

After some of the program descriptions in the college-by-college listing there may be a section entitled "Additional Admission Requirements" or "Special Admission Requirements" which lists specific requirements for admission to the programs.

The requirements listed under the heading "Additional Admission Requirements", are in addition to the Ontario Secondary School Graduation Diploma (OSSGD) and apply to all diploma programs in the listing unless indicated otherwise. In the example below, this particular college requires Grade 12 English in addition to an OSSGD for admission to all the programs listed. It also requires Grade 12 English and history, in addition to an OSSGD, for general arts and science.

• Arts and Science – General and Applied

Two-year diplomas

Early childhood education, general arts and science, recreation leadership.

Additional admission requirements: Grade 12 English; general arts and science – Grade 12 history.

Under the heading "Special Admission Requirements" are listed the requirements for admission to the certificate programs.

Programs Offered

All programs offered at the colleges are described in the college-by-college listing in four broad categories: arts and science – general and applied, business, health sciences, and technology.

The listing also includes descriptions of:

- college preparatory programs for academic upgrading
- alternative programs,
- continuing education.

For a listing of programs offered by individual colleges, students can consult the CAAT program charts on the following pages and the listings in par-

ticular college sections. For specific information on any program or course, students should check the individual college calendars or visit their nearest college.

An alphabetical cross-reference index accompanies the CAAT charts. Also, a uniform style is maintained for most "Technician," "Techniques," and "Technology" programs. These terms are abbreviated and listed alphabetically:
"Technician"...is shown as..."Tn"
"Techniques"...is shown as..."T'ques"
"Technology"...is shown as..."Ty".

To find a subject in the chart:
1. locate the desired program name in the index;
2. note the code number which follows this name; and
3. turn back to the appropriate numerically coded listing in the CAAT chart.

Diploma Nursing Programs
Colleges of applied arts and technology and Ryerson Polytechnical Institute are responsible for the training of diploma nurses. After successfully completing the program, graduates are eligible to write an examination, conducted by the College of Nurses of Ontario, for registration as nurses in Ontario.

Recently, the colleges of applied arts and technology implemented new program standards which lengthen the clinical experience component of the diploma nursing programs. Colleges have the flexibility to implement the new standards in the program format that they consider to be most appropriate. The Ministry of Colleges and Universities' stipulation is that the total teaching time not exceed 24 months.

The formats chosen by the CAATs include two and one-half year, three-year, and two-year programs. The varying program patterns provide a choice to the students in both pacing and duration.

The two-year program is a more concentrated, six-term educational offering, and is structured to include terms during the summers. The three academic year program also consists of six terms, but it allows for free summers. The two and one-half year program has shorter summer terms as well as a final fall term, which terminates in December.

Technology
Colleges of applied arts and technology offer three types of training programs in technology:

• *Technologist Programs*
A technologist is primarily involved in the design and development of industrial products and processes. A typical full-time technologist training program takes six semesters or three years with free summers.

• *Technician Programs*
A technician is primarily involved in the installation, maintenance, manufacture, and quality control of industrial products. A typical full-time technician program lasts four semesters or two years, with free summers.

Colleges also offer non-semestered technician programs in selected occupations. Non-semestered technician programs are accelerated, including terms during the summer.

These programs are supported by the Canada Employment and Immigration Commission (CEIC) under the Canada-Ontario Training Agreement of 1982. The CEIC may pay tuition costs and provide either a weekly Unemployment Insurance benefit or a weekly allowance. Students referred to a college away from their place of residence may receive travel and living-away-from-home allowances.

• *Certificate Programs*
Certificate programs last less than one year. They prepare trainees for skilled and semi-skilled positions. In some cases, students participating in certificate programs are supported by the Canada Employment and Immigration Commission (CEIC) under the Canada-Ontario Training Agreement of 1982. The CEIC may pay the tuition fees on behalf of the student and provide income support during the training program – either through Unemployment Insurance benefits or a living allowance.

Other students pay their own fees. The course of study is the same for both fee-payers and federally supported students. Some persons may have to take a college preparatory course, such as Basic Training for Skill Development (BTSD) before entering a certificate program. Further information about federal assistance is available from the local Canada Employment Centre or from the college. Note: Certificate programs are also offered in other fields of study.

Technological Careers for Women: Traditionally, few women have entered technological careers. However, colleges are encouraging and assisting women to prepare for careers in non-traditional occupations.

Of course, all college programs are open to both men and women. Some women may require preparatory training before selecting a career and beginning training. Therefore, a number of colleges offer courses specifically for women interested in careers in technology; they are listed on page 29.

College Preparatory Programs for Academic Upgrading

College preparatory programs are designed to help mature students prepare for their next academic or skill training step. One of the major college preparatory programs is Basic Training for Skill Development (BTSD).

Before beginning an upgrading program, students must normally take a test to assess their academic background and level. Working at their own pace, students must meet specified objectives before continuing to the next level. Certificates are issued for each BTSD program completed. Students should be aware that they cannot apply certificates received for completing a BTSD program towards an Ontario Secondary School Graduation Diploma. Completion of an upgrading program in a specific area (academic, technical, etc.) will prepare students to enter a college-level program in that area at any college.

Fees are charged, but students may be eligible to receive financial support from the Canada Employment and Immigration Commission under the Canada-Ontario Training Agreement of 1982. All colleges offer some, if not all, of the three levels.

Alternative Programs

In addition to the programs listed above, colleges play a vital role in a number of other programs administered by the Ministry of Colleges and Universities:

• *Apprenticeship*

Colleges provide the institutional portion of training under the apprenticeship program. Apprentices spend about 90 per cent of their training program learning on-the-job; however, they do attend college to learn skills they might not have learned in the workplace. For instance, a general machinist apprentice attends the college three times during the four-year apprenticeship program. These college terms – called Basic, Intermediate, and Advanced – each last two months. The number and length of in-college terms varies from occupation to occupation. Apprentices attending colleges may receive financial support from the Canada Employment and Immigration Commision, under the Canada-Ontario Training Agreement of 1982. Further information on apprenticeship is provided in another section of this directory.

• *Training in Business and Industry (TIBI)*

This program is designed to assist employers and unions to up-grade the skills of workers in order to prepare for a changing work environment. Training to help workers adapt to advanced technology is offered through the Training in Business and Industry II (TIBI II) program. For more information, speak to your employer.

• *Ontario Career Action Program (OCAP)*

OCAP gives young people between the ages of 16 and 24 the opportunity to gain enough experience to obtain their first career-related job. OCAP trainees receive a weekly stipend of $100 for up to 16 weeks. For more information, contact the college.

• *Ontario Management Development Program*

This program is designed to help managers improve their supervisory skills. Programs offered include human relations, effective communication, and planning. It is offered at most colleges and in many workplaces. For more information, contact your employer.

• *Industrial Training*

Colleges also assist employers to establish on-the-job training programs. Employers may receive financial support for these programs from the Canada Employment and Immigration Commission under the Canada-Ontario Training Agreement of 1982. For more information, contact your employer.

• **Continuing Education**

Continuing education provides the opportunity to all members of the community to learn at a time and place that is convenient to them.

The majority of colleges in Ontario offer a variety of credit and non-credit courses through their continuing education divisions. Courses can usually be taken on a part-time, day or evening basis throughout the year. Depending on the college, students may work toward a certificate or diploma. In addition, most colleges offer non-credit courses covering a broad range of career-oriented and general-interest subjects.

In general, these courses are offered on college campus locations, but many are offered at other locations, such as churches, secondary schools, and community centres.

For lists of courses and programs offered through continuing education, contact the college.

Transfer Possibilities for CAAT Graduates

While it is not intended that the CAATs should act as feeder institutions to the universities, graduates of two-year programs may be accepted on an individual basis for admission to the first year of certain university programs.

Qualified graduates of the three-year programs may, in some instances, be admitted to the second

year of a related university program. For example, a graduate from an engineering technology program may qualify for admission to a university degree program in engineering, if places are available. Decisions about the admissibility of individual CAAT graduates to degree programs are made by the admissions officers of the universities concerned.

Fees
Tuition fees for a full program are approximately $260 per semester or $520 per academic year for most full-time diploma programs. Fees may vary, however, according to program length. Fees for foreign students are $4 320 per two-semester academic year. See the introductory section in *Horizons*, "Students' Costs", for further information.

Other Facilities
The colleges of applied arts and technology were planned to be within commuting distance of the main population centres. Therefore, provision has not been made for residence accommodation, except at some Northern Ontario colleges. Students can check with the housing bureau or student services office of the college they plan to attend regarding available residence facilities or lists of off-campus housing in the community.

Each college operates counselling services and health centres, and most have a wide range of sports facilities, resource centres, and job placement services.

Further Information
For more detailed information on the colleges of applied arts and technology, check the individual college sections in *Horizons*, consult the college calendars, which are available in secondary school guidance offices, or get in touch with the registrar's office of the college. Additional information may be obtained from
Communication Services Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2
Telephone (416) 965-6407

Occupational Health and Safety
Information about the provincial Occupational Health and Safety Act, 1978, is available from:

- Information Services Branch
  Ministry of Labour
  400 University Avenue
  Toronto, Ontario
  M7A 1T7
  Telephone (416) 965-7941
- Occupational Health and Safety Resource Centre
  University of Western Ontario
  London, Ontario
  N1A 5B9
  Telephone (519) 679-3913
- Centre for Occupational Health and Safety
  University of Waterloo
  Engineering ... Building
  Waterloo, Ontario
  N2L 3G1
  Telephone (519) 885-1211 ext. 2685
- Resource Centre for Occupational Health and Safety
  Lakehead University
  Thunder Bay, Ontario
  T7B 5E1
  Telephone (807) 345-2121 ext. 671
- Occupational Health and Safety Resource Centre
  Queen's University
  Health Sciences
  25 Union Street
  Kingston, Ontario
  K7L 2N6
  Telephone (613) 547-5749

Apprenticeships

Legend

- 2 — Numeral shows number of semesters for regular program (normally 2 per year) or number of in-college sessions for apprenticeship program (normally of 7 or 8 weeks' duration each).
- (2) — Program is new or pending approval or dormant.
- 2 — Shorter program is available.
- 2 — Program is also offered in French.
- 2 — Program is bilingual.
- S — Duration of program is less than 2 semesters.
- Tn — Technician (4 semesters).

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
001	**Regulated Apprenticeships**																												
002	Alignment & Brakes Mechanic					2																							
003	Auto Body Repairer	2				2				2														1					
004	Automotive Machinist					3																							
005	Automotive Painter					1																		1					
006	Baker	2									2																		
007	Barber										3																		
008	Boilermaker (Construction)					3																							
009	Boilermaker (Shop)													4															
010	Brick & Stone Mason										3																3		
011	Carpenter, General	2					2	2			2	2									2						2	2	
012	Cook	2									2	2					(2)								2				
013	Dry-Wall & Acoustic Mechanic										2																		
014	Electrician	3					3	3	3	3	3		3			3		3			3	3			3			3	
015	Farm Equipment Mechanic									3																			
016	Fitter / Welder								3																				
017	Fuel & Electrical Systems Mechanic					1																							
018	Glazier & Metal Mechanic										3																		
019	Hairdresser / Hairstylist	2								2	3	2	2			3					2	2			2			2	
020	Heavy Duty Equipment Mechanic					3		3										3							3				
021	Ironworker										3																		
022	Lather	2									2																		
023	Machinist, General			3		4	3		3	3	3	4	3		3		(3)										3	3	
024	Millwright			3				3	3		3	3					(3)	3							3		3	3	
025	Motor Vehicle Mechanic	3				3	3	3		3					3	3	(3)	3			3			3	3				
026	Motorcycle Mechanic					2																							
027	Mould Maker					4	S		3		3	2																	
028	Painter	2																											
029	Plumber	3					3			3	3		3			3					3	3			3				
030	Radio & Television Tn										2																		
031	Refrigeration & Air Conditioning Mechanic	3									3					3													
032	Saw Filer Fitter																	1											
033	Service Station Attendant					1																							
034	Sheet Metal Worker	3								3	3		3			3													
035	Sprinkler & Fire Protection Installer										3																		
036	Steam Fitter										3		3												3				
037	Tool & Die Maker					3	3		3	3	3	4	3				(3)										3	3	
038	Transmission Mechanic					2																							
039	Truck / Trailer Repairer					2																							
040	**Selected Non-regulated Apprenticeships**																												
041	Electric Machine Repair																		3										
042	Fitter, Structural Steel Plate Work			3							3																3		
043	Horticulturist								2				2																
044	Industrial Electronic Controls							1			1							1							3				
045	Industrial Woodworker											1																	

Legend

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- (2) — Program is new or pending approval or dormant.
- 2 — Shorter program is available.
- 2 — Program is also offered in French.
- S — Duration of program is less than 2 semesters.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)[2]	Sir S. Fleming (Lindsay)
046	Marine & Small Engine Mechanic					2		3																	2			2	
047	Retail Meat Cutter										1																		
048	Truck & Coach Repairer					3																			3				
049	Watch Repairer										2																		

Regular Programs

050	**Arts, Visual, Creative, General**																												
051	Advertising Art									6															6				
052	Apparel, Management / Design										6																		
053	Art Conservation Tques																										6		
054	College Vocational Program																									6			
055	Commercial Art & Design / Packaging Design	4											6								4				6				
056	Commercial Ceramics										4																		
057	Computer Graphics																										2		
058	Crafts & Design / Material Arts / Furniture Accessory				(4)							6	6								S				6		6		
059	Creative & / or Commercial Arts & Crafts[1]					2						6													6		6		
060	Dance										4																		
061	Design Arts / Basic Design											6													6	6	2		
062	Fashion Arts / Modelling / Design / Merchandising					4				6	6	4	2				6					6				6	4	4	
063	Fine Arts & Crafts / Administration			6						6				2			4	4				6			6			4	
064	Floriculture, Retail												4																
065	General Arts & Science	4	4	4	4	6		4		4		4	4	4	6		4										4	4	4
066	Graphic Design			6			6		6		6	6	4									6		6			6		
067	Horsemanship / Equine Care / Harness / Horse Industry Operation												4													4			
068	Industrial Design									6		6																	
069	Interior Design / Decorating	6						4	6	6		6	6				6				4								
070	Jewellery Arts / Repairs / Watchmaking										6																6		
071	Landscape Design	4								6			6																
072	Metal Arts																										6		
073	Music			6									6			6													
074	Music Industry Arts									4																			
075	Painting			6																					6				
076	Piano										4																		
077	Pottery			6																					6				
078	Sign Writing (Commercial Art) / Screen Printing / Print Making			6							2														6				
079	Theatre Arts / Performing Arts										4		(6)				6										4		
080	Urban Design									6																			
081	Visual Arts: Merchandising																								6	4	6		
082	**Business: Accounting**																												
083	Accounting	6		6	6	6	6	6	6	4	4	4	4	6	6	6	4	6	6		6	4		4	4	6	6	4	
084	Finance	4				6			6												6	6	6	4		6	6	6	

1 May include: Art Resources, Bookbinding, Ceramics, Fabrics, Glass, Visual Arts.

Legend

- 2 — Numeral shows number of semesters for regular program (normally 2 per year) or number of in-college sessions for apprenticeship program (normally of 7 or 8 weeks duration each).
- (2) — Program is new or pending approval or dormant.
- 2̄ — Shorter program is available.
- 2̲ — Program is also offered in French.
- 2̂ — Program is bilingual.
- S — Duration of program is less than 2 semesters.
- Tques — Techniques (2 semesters or less).
- Ty — Technology (6 semesters).

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
085	Public Assessment / Real Property Appraisal / Administration														4									4		4			
086	**Business: Administration & Management**																												
087	Apparel Retailing																						2		2				
088	Business, General	6̄	6̄		4̂	4		4	4	4	4	4	4̄			4	4	6̄	6̄		4	4		4	4	4	4	4	
089	Business Administration / Quantitative Methods / Small Business Skills	6	6̄	6	6	6	6	4	6	6	5̄	6	6	6	6̄	6		6̄	6̄			6	6	6		6̄	6̄	6	
090	Business: Marina / Recreation Vehicles / Motor Carrier Administration																										4	4	
091	Business: Systems Analysis									4																			
092	Construction Management / Residential										4																		
093	Corporate Administration																										6		
094	Farm Business / Management									4																			4
095	Finance	4							6̄	4							6					6	6	6̲					
096	General Management	6̄				6		4	6̄				S					6̄	6̄						4				
097	Human Services Administration																										4		
098	Industrial Administration / Management								6								6							6̄					
099	Insurance										4					4													
100	International Business																									6̄			
101	Legal / Office Administration / Assistant	4̂		4	4	4			6	4̄			2				4				4	4				4			
102	Materials Management / Purchasing					6	6			4																		6	
103	Municipal / Public Administration / Government Administration									4																4			
104	Museum Ty	6																											
105	Performing Arts, Management							4																					
106	Personnel Administration / Labour Relations / Human Resources Mgt							6	4				S				6									2			
107	Production & / or Operating Management					6																							
108	Property Mgt / Real Estate / Insurance / Standards / Assessment			(6̄)						4	4																		
109	Retail Administration / Management	4				4					4						4										4	2	
110	Urban Transit Operations					(4)																							
111	Wood Products Management																		6̄										
112	**Business: Data Processing**																												
113	Computer Information Systems												6												(6)				
114	Computer Operations & Analysis / Data Processing	6̄		6	6	4	(4)	6	6̄	6̄	4	6	4̄	(6)	6̄		6	6̄	6̄		6̄	6	4	6	(6)	4	4	4	
115	Computer Programmer / Operator / Tques					6̄			4				3̄													(6̄)			
116	Computer Systems Analysis					6			6																	6	6	6	
117	Information Processing	3										4					4								4				
118	Junior Programmer				3̄						3											3	3						
119	Microcomputer Business Applications												2																
120	Microcomputer Management																										4		
121	**Business: Marketing, Sales**																												
122	Cosmetics Retail Management / Sales																									4̄			
123	Insurance															4													
124	Marketing	6̄		6̂	6	6̄	6	4	6̄	4	4	6̄	4̄	6̄		6̄	6	6̄	6̄		6̄	6̄	6	6̄	4	6̄	6̄	6	
125	Parts Management & Merchandising															2													
126	Physical Distribution										4																		
127	Retail Marketing					4							4														4		
128	Sales & Merchandising / Recreational Sale										2						4								2			4	
129	**Business: Secretarial**																												
130	Court Reporting										4̄																		

Legend

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- (2) — Program is new or pending approval or dormant
- 2 — Shorter program is available
- 2 — Program is also offered in French
- 2 — Program is bilingual
- 2 — Program is offered in French only
- Tn — Technician (4 semesters)
- Tques — Techniques (2 semesters or less)

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
131	Dicta-Typist / General / Medical	2		2	2	2	2				2						2	2	2						2	2	2	(2)	
132	Receptionist (Executive) Tques										2																		
133	Secretarial Arts, Bilingual	4			2												4	4	4					4		4			
134	Secretarial Arts, General / Executive / Procedural / Administrative	4	4	4	2	4	2	4	4	4	4	4	4	4	4	4	4	4	4		4		4	4	4	4	4		
135	Secretarial Arts, Legal	4	2	4	2	4	2	4	4	4	4	4	4	4	4	4		4	4		4		4	4	4	4	4		
136	Secretarial Arts, Legal / Word Processing Operator / Procedures & Admin	2				4	2		4		4							4	4			2			4	(4)	4		
137	Secretarial Arts, Medical / Medical Tn	4		4	2	4	2	4	4	4		4	4	4	4	4		4	4		4	4		4		4	4	4		
138	Secretarial Arts, Steno-Typist / Word Processing Correspondence Spec				2	2			4		2		2				2	4								4				
139	Secretarial Arts, Technical – Eng / Scientific / Educ								4																				
140	Secretarial Science			6					6	6								6	6						4				
141	Stenographer				2																	2	2						
142	**Communications**																												
143	Advertising, Creative & / or Business / Management	4				6			6			4	4		4	6					6	6			6	4	6		
144	Animation / Illustration																										6		
145	Book Editing & Design					4																							
146	Broadcasting, Radio				4					4			6		4	4													
147	Broadcasting, Radio & Television	4				6	6	4								6									4				
148	Broadcasting, Television				4					4					4	6													
149	Communication Arts / Organizational					4								4															
150	Film Production / Cinematography							4					6																
151	Graphic Communications				4																								
152	Human Relations																4												
153	Journalism Print / Broadcast / General	2		4	4	6	6		6	4		4	6	4	4	4	6				6						4		
154	Media Arts																										4		
155	Photographic Arts							4		6			4									6					4		
156	Public Relations, Creative & / or Business								6				6									4			4				
157	Radio & Television Arts						6																						
158	Radio & Television Writing					6																					4		
159	**Community Services**																												
160	Activation Co-ordinator										4																		
161	Addiction Counsellor										4																		
162	Arena / Ski Area Management												3																
163	Behavioural Science / Mental Health Worker					4				2					4							6		4					
164	Child Care Worker / Child Services	4		4		6		5		4	4		6			4		4				6	6		4				
165	Child Studies / Nanny																										4		
166	Coaching Tques																									4	4		
167	Community: Environmental Planning / Development															4													
168	Community Studies / Social Resource Development												4																
169	Correctional Worker / Community Worker				(4)	4					4											4					4	6	
170	Counsellor: Special Care / Residential / Rehab / Workshop Rehab					4							4																
171	Early Childhood Education / Day Worker	4		4		4	4	4		4	4	4	5	4	4	4	4	4			4	4			4	4	4	4	
172	Family / Consumer Studies												4														4		
173	Fitness Instructor									4	4																		
174	Infant / Toddler Care & Education Tques – Post-Diploma																								2				
175	Law & Security Administration / Customs	4		4			4	4		4		4	4		4	4	4				4					4	4	4	

Legend

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(2)	Program is new or pending approval or dormant
2	Shorter program is available
2	Program is also offered in French
2	Program is bilingual
S	Duration of program is less than 2 semesters
Tn	Technician (4 semesters)
Tques	Techniques (2 semesters or less)
Ty	Technology (6 semesters)

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
176	Lifestyle Educator																										(4)		
177	Mental Retardation Counsellor	4		4		4		5		5			4		4			2			6		5		4		S		
178	Nursery Aide / Family Day Care										2			2												4		
179	Ontario Native Education (Alcoholism & Drug Abuse Worker)																	4											
180	Ontario Native Education (Alcoholism Worker)							3																					
181	Ontario Native Education (Community Worker)							5																					
182	Ontario Native Education (Recreation Leadership Trg)																	(4)											
183	Ontario Native Education (Social Service Worker / Business Admin)																	(6)											
184	Outdoor Recreation Tn / Golf Course Tn																									4			
185	Parks Operation & Services													4											6	4			
186	Piano Tn										4																		
187	Recreation / Facilities Management / Administration / Leadership	4			4	4	4	4		4		2	4			4										6		4	
188	Research Tques																										4		
189	Social Services Worker	4		4		4	4	4		4			4			4	4	4								(4)	4	4	
190	Sports Administration								6																				
191	**Food, Hospitality & Tourism**																												
192	Baking Tques	2									2																		
193	Cook	2																							2				
194	Flight Services																									3			
195	Food Service Mgt / Supervision / Culinary Mgt / Beverages / Chef (Pre-Emp)				4	4	4		(2)		4		6								4				(4)		4	4	
196	Home Economics / Management / Dietary Services																											4	
197	Hospitality Administration & Services / Travel	4				6																							
198	Hotel / Motel / Restaurant Management, Operation	4			4	6		4		4	4	4	4		6		6								4		4		
199	Retail Meat Cutting	2									2																		
200	Tourism Management											6																	
201	Tourism / Travel / Transportation	2				6		4		3			4			(S)	4				4					6	2	6	
202	**Health (Allied)**																												
203	Ambulance & Emergency Care	2		2		2	2			2			2				2				S					4	2		
204	Animal Health / Care																				4	6							
205	Chiropody										6																		
206	Dental Assistant / Hygienist	4		4	2			4	4	4	5						4				4					4			
207	Dental Ty / Denture Therapy										6																		
208	Funeral Services[2]												2																
209	Health Care Aide	S		S	S	S	S	S		S	S	S	S	S	S	S					S	S	S	S	S	S	S	S	
210	Health Records / Administration	4								2							4												
211	Health Science – Post-basic	S		S		S	S		S	S	S		S			S	S					S	S	S	S	S	S		
212	Health Sciences (Preparatory)									2	1																		
213	Hospital Orderly	S						S									S												
214	Medical Laboratory Ty[3]	6		6	6				2	6				6		9			2		6	8							
215	Nursing Assistant				2		2		2	2		2	2		2			2			2	2	2						
216	Nursing Assistant – Post-RNA[4]				S	S						S	S									S	S						
217	Nursing (Diploma)[5]	6	6	6	7	7	7	7	7	6	7	6	7	6	7	6	6	6	7		7	6	6	6	6	7	6	6	
218	Nursing Refresher / Upgrading	S		S	S	S	S	S	S	S	S	S	S		S	S		S			S	S	S	S	S	S		S	
219	Optician, Dispensing											4																	
220	Orthotic-Prosthetic Tn / Clinician – Post-basic										4																		

2. An internship of 15 months is required.

3. Program is offered in first year only at Durham College and Northern College.

4. Various courses are offered.

5. Program length varies from 6 to 7 semesters.

Legend

- 2 — Numeral shows number of semesters for regular program (normally 2 per year) or number of in-college sessions for apprenticeship program (normally of 7 or 8 weeks duration each).
- (2) — Program is new or pending approval or dormant.
- 2 — Shorter program is available.
- 2 — Program is also offered in French.
- 2 — Program is bilingual.
- S — Duration of program is less than 2 semesters.
- Tn — Technician (4 semesters).
- Tques — Technique (2 semesters or less).
- Ty — Technology (6 semesters).
- * — Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
221	Pharmacy Assistant	2											2								2								
222	Physiotherapy / Occupational Therapy															6													
223	Radiography (Medical) Ty			6				6		6						6													
224	Respiratory Ty	6								6																			
225	Ultrasonography – Post-basic															2													
226	**Instructional Resource Services**																												
227	Audio-Visual / Instruction Materials / Equipment Tn			4						4			4													4		4	
228	Educational Resources Tn																4											(4)	
229	Library Tn	4		(4)						4							4									4	4		
230	**Technology / Technician Programs**																												
231	Air Conditioning & Refrigeration Eng Tn									*	*		*				*												
232	Air Conditioning & Refrigeration Eng Ty									*																			
233	Architectural (Building) Tn					(*)																							
234	Architectural (Design) Tn					*		*					*																
235	Architectural (Design) Ty					*		*					*																
236	Architectural (Drafting) Tn					*					*				*			*							*				
237	Architectural (Drafting) Ty																	*											
238	Architectural (Mechanical Systems) Tn	*																											
239	Architectural Tn	*				*				*						*		*							*				
240	Architectural Ty	*				*				*						*		*			*								
241	Aviation (Aircraft Maintenance) Tn				*	*		*																					
242	Aviation (Avionics Maintenance) Tn				*	*		*																					
243	Aviation (Flight Instructor Training) Tques																									*			
244	Aviation (Flight) Ty							*																	*	*			
245	Aviation (Manufacturing) Ty							*																					
246	Aviation (Manufacturing) Tn							*																					
247	Aviation Pilot (Rotary Wing) Tques				*																								
248	Aviation (Transportation & Industry) Eng Ty								*																				
249	Aviation (Air Traffic Controller) Tn											*																	
250	Biological (Chemical) Tn					*																				*			
251	Biological (Industrial Microbiology) Tn					*																							
252	Biological (Microbiology / Electron Microscopy) Ty					*																				*			
253	Biological (Research) Ty																									*			
254	Biological (Sciences) Ty				*	*																							
255	Cartographic (General) Tn	*																											*
256	Cartographic (Photogrammetric) Tn	*																											*
257	Cartographic (Thematic) Ty																												*
258	Cartographic Tn																									*			*
259	Chemical (Biochemical) Tn					*																							
260	Chemical (Biochemical) Ty	4				*																							
261	Chemical Eng Tn				*	*								*	*		*												
262	Chemical Eng Ty	*			*	*			*				*	*	*	*	*				*						*		
263	Chemical (Environmental) Eng Ty				*																								
264	Chemical (Food & Drug) Ty					*			*																				
265	Chemical (Industrial) Eng Tn					*																							

Legend

(2) Program is new or pending approval or dormant.
2 Program is also offered in French.
Tn Technician (4 semesters).
Tques Techniques (2 semesters or less).
Ty Technology (6 semesters).
* Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St Clair	St Lawrence (Kingston)	St Lawrence (Brockville)	St Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
266	Chemical (Industrial) Eng Ty					*							*																
267	Chemical (Industrial Hygiene) Eng Ty													*																
268	Chemical (Laboratory) Tn					*							*														*		
269	Chemical (Laboratory) Ty					*																				*			
270	Chemical (Microbiology) Ty					*							*																
271	Chemical (Pharmaceutical) Ty																									*			
272	Chemical (Polymer) Eng Tn					*																							
273	Chemical (Polymer) Eng Ty					*																							
274	Chemical Tn					*								*		*										*			
275	Chemical Ty					*			*					*												*			
276	Civil (Bldg Construction) Tn																								*				
277	Civil (Construction) Eng Tn				*											*									*		*	*	
278	Civil (Drafting) Eng Tn									*																			
279	Civil Eng Tn			1*		*			*		*	*	*		*	*			*						*	*			
280	Civil Eng Ty			*		*	*	*	*		*		*		*	*			*		*	*	*			*		*	
281	Civil (Explosives) Eng Tn												*													*			
282	Civil (Marine) Eng Ty																									*			
283	Civil (Municipal) Eng Ty					*				*		*																	
284	Civil (Public Works) Eng Tn					*																							
285	Civil (Public Works) Eng Ty					*																							
286	Civil (Structural) Eng Ty									*																			
287	Civil (Transportation) Eng Tn												*																
288	Civil (Transportation) Eng Ty												*																
289	Computer (Computing Science) Ty	1*																	*										
290	Computer (Data Processing) Tn															*													
291	Computer Eng Tn								*										*										
292	Computer Eng Ty								*								*		*						*				
293	Computer (Micro) Eng Ty																							*					
294	Computer (Micro) Service Tn																										*		
295	Computer (Process Control) Ty				(*)																								
296	Computer (Science) Ty					*													*								*		
297	Computer (Systems) Ty	1*				*										*			*										
298	Construction (Carpentry) Tques									*																			
299	Construction Eng Tn							*							*	*													
300	Construction Eng Ty						*				*						*												
301	Construction (Heavy Equipment) Eng Tn																										*		
302	Construction(Management) Eng Th										*																		
303	Construction (Management) Eng Ty									*	*																		
304	Construction (Supervisor) Tn									*																			
305	Control (Systems) Eng Tn					*																							
306	Control (Systems) Eng Ty					*				*																			
307	Digital Electronics Eng Tn	*																									*		
308	Drafting Eng Tn						*																						
309	Drafting Tn				*						*							*											
310	Drafting Tques													*															

Legend

②	Program is new or pending approval or dormant.
#	Shorter program is available.
‡	Program is also offered in French.
Tn	Technician (4 semesters).
Ty	Technology (6 semesters).
*	Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
311	Electrical (Computer / Control) Eng Ty							*																					
312	Electrical (Control) Ty															*													
313	Electrical (Controls) Eng Tn												*																
314	Electrical (Design) Eng Tn										*																		
315	Electrical (Electrical Power) Eng Ty					*													*										
316	Electrical Eng Tn			*				*		*	*	*			*		*	*							*		*		
317	Electrical Eng Ty					*				*	*	*			*			*							*		*	*	
318	Electrical (Power) Eng Tn															*													
319	Electrical (Power) Eng Ty					*											*		*				*						
320	Electro-Mechanical (Cybernetics) Eng Ty																											*	
321	Electro-Mechanical (Drafting) Eng Tn	#‡																					*						
322	Electro-Mechanical (Energy Systems) Eng Ty																											*	
323	Electro-Mechanical Eng Tn												*							*									
324	Electro-Mechanical Eng Ty												*																
325	Electro-Mechanical (Precision Instruments) Eng Tn												*																
326	Electronics (Acoustics) Eng Tn										*																		
327	Electronics (Avionics) Eng Tn					*																				*			
328	Electronics (Biomedical) Eng Tn									*																			
329	Electronics (Biomedical) Eng Ty									*																			
330	Electronics (Communications) Eng Tn					*																				*			
331	Electronics (Computer) Eng Tn								*																	*	*		
332	Electronics (Computer) Eng Ty								*							*												*	
333	Electronics (Computer Systems) Eng Ty					*	*																						
334	Electronics Eng Tn	1#‡	*	1#		*	*	*	*	*	*	*	*		*	*	*	*	*		*	*		*	*	*	*	*	
335	Electronics Eng Ty	*		*		*			*	*	#‡	*	*	*	*	*	*		*		*	*		*	*	*	*		
336	Electronics (Industrial) Tn						②																						
337	Electronics (Medical Equipment) Eng Tn												*																
338	Electronics (Nuclear Power & Control) Eng Ty																									*			
339	Electronics (Power Control) Eng Ty					*																							
340	Electronics (Telecommunications) Eng Ty						*																			*			
341	Electronics Tn[6]			②																									
342	Energy Systems / Conversion Eng Ty										*					*													
343	Environmental Science Tn / Ty				*																								
344	Fire (Protection) Tn / Ty	*																								*			
345	Fluid Power Eng Tn					*	*																						
346	Fluid Power (Robotics) Eng Ty					*																							
347	Food (Drug) Ty								*																				
348	Food (Industrial Processing) Tn				*																								
349	Food (Service Management) Tn																				*								
350	Forestry (Fish & Wildlife) Ty																							*				*	
351	Forestry (Parks & Recreation) Ty																							*				*	
352	Forestry Tn		*																					*				*	
353	Forestry Ty																											*	
354	Furniture (Production & Design) Tn										*																		
355	Furniture (Renovation) Tn																				*								

6. Program length is 55 weeks; program is non-semestered.

Legend

(2) Program is new or pending approval or dormant.
2 Shorter program is available.
2 Program is also offered in French.
Tn Technician (4 semesters).
Tques Technique (2 semesters or less).
Ty Technology (6 semesters).
• Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St Clair	St Lawrence (Kingston)	St Lawrence (Brockville)	St Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
356	Geographical (Information Systems) Tn																												⊙
357	Geological Eng Ty			•																									•
358	Geological (Geotechnics / Minerals) Tn			•																					•				•
359	Geotechnical Ty																												⊙
360	Graphics (Printing) Tn	2•					•				•						•												
361	Graphics (Printing) Ty										2•																		
362	Horticultural Tn																•												
363	Industrial Eng Tn															•											•		
364	Industrial Eng Ty								•																				
365	Industrial (Fire Prevention) Eng Tn	•																											
366	Industrial (Laboratory) Ty																									•			
367	Industrial (Management) Eng Ty												•			•					•								
368	Industrial (Materials Testing) Tques																											•	
369	Instrumentation Eng Tn					•		•																	⊙				
370	Instrumentation (Industrial) Eng Tn	•		2•		•					•		•	•		•						•							
371	Instrumentation (Industrial) Eng Ty										2•			•								•							
372	Instrumentation (Process, Measurement & Control) Eng Tn					•														•									
373	Instrumentation (Process Control) Eng Tn					•																		•					
374	Landscape Tn												•								•								
375	Landscape Ty												•																
376	Manufacturing (Design) Eng Tn																				•								
377	Manufacturing Eng Tn									•			•				•												
378	Manufacturing Eng Ty									•			•																
379	Manufacturing (Wood Products) Tn						2•																						
380	Marine Eng Ty											•												•					
381	Marine (Navigation) Ty											•																	
382	Mechanical (Applied Machine Shop) Tques				•																				•				
383	Mechanical (Building Operations Management) Ty																										•		
384	Mechanical (Building Services Drafting) Eng Tn										•																		
385	Mechanical (Design) Eng Tn					•				•																			
386	Mechanical (Design) Eng Ty					•			•																				
387	Mechanical Drafting (Design) Eng Tn										•		•				•											•	
388	Mechanical (Drafting) Eng Tn						•							•											•				
389	Mechanical (Drafting) Tn											•				•													
390	Mechanical Eng Tn					•		•	•						•				•			•			•	•	•		
391	Mechanical Eng Ty	2•				•	•		•			•		•		•	•		•		•	•			•	•	•		
392	Mechanical (Hydraulic & Pneumatic) Eng Tn					•	•																						
393	Mechanical (Industrial) Eng Tn					•						•																	
394	Mechanical (Industrial) Eng Ty					•																							
395	Mechanical (Machine Shop Operations) Tn				⊙																								
396	Mechanical (Manufacturing) Eng Ty														•														
397	Mechanical (Mine Maintenance) Eng Tn																			•									
398	Mechanical (Mine Maintenance) Eng Ty																			•									
399	Mechanical (Mine Ventilation) Tn																								•				
40x	Mechanical (Mobile Equipment) Eng Ty									•																			

Legend

- (2) Program is new or pending approval or dormant.
- 2 Shorter program is available.
- 2 Program is also offered in French.
- Tn Technician (4 semesters).
- Tques Technique (2 semesters or less).
- Ty Technology (6 semesters).
- • Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St. Clair	St. Lawrence (Kingston)	St. Lawrence (Brockville)	St. Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
401	Mechanical (Nuclear) Eng Ty	2																											
402	Mechanical (Numerical Control) Eng Tn																												
403	Mechanical (Tool & Die) Eng Tn												•																
404	Mechanical (Tool Design) Eng Ty					•				•			•																
405	Mechanical (Toolmaking) Eng Tn									•																	•		
406	Medical (Prosthetic Aide – Hearing) Tques	2								•																			
407	Metallurgical Eng Tn																												
408	Metallurgical Eng Ty			•						•																•			
409	Minerals Eng Ty			•											•												•		
410	Mining Eng Tn																												
411	Mining Eng Ty			•																								2	
412	Motive Power (Automotive) Tn			•																•									
413	Motive Power (Diesel) Tn					•				•										•									
414	Motive Power Eng Ty									•																			
415	Motive Power (Heavy Equipment Operation) Tn														•										•				
416	Motive Power (Parts Merchandising) Tques																												
417	Motive Power (Service Management) Tn									•																		•	
418	Motive Power Tn					•				•																			
419	Pest Control Tn					•															•								
420	Plano Tn																												
421	Resources (Air / Water) Eng Ty									•																		•	
422	Resources (Drilling) Tn																												
423	Resources Eng Tn																							•					
424	Resources Eng Ty																											•	
425	Resources (Marine) Eng Ty										•														•				
426	Safety Eng Ty																								•				
427	Science (Laboratory – Air / Water) Ty											•													•				
428	Science (Laboratory) Tn								•																				
429	Science (Laboratory) Ty																												
430	Science (Photographic) Tn								•												•					•			
431	Science (Pulp & Paper) Eng Ty	2																			•								
432	Solar Energy Ty																												
433	Stationary (Power) Eng Ty											•											•						
434	Stationary (Power / Plant) Eng Tn		2																										
435	Survey (Aerial) Tn								•																				
436	Survey (Hydrographic) Ty										•																		
437	Survey Tn										•																		
438	Survey Ty	•				•		•	•	•	•		•	•	•	•													
439	Textile Eng Ty	•							•		•					•													
440	Tooling (Plastic) Tn													•															
441	Tooling (Toolmaker) Tn																												
442	Transportation (Planning) Ty	2		•														•	•										
443	Underwater Skills Tques												•																
444	Videotex (Creation / Marketing / Systems) Ty																												
445	Water Resources (Field) Tn											2											•						
												2																	

Legend

(2) Program is new or pending approval or dormant.
2 Shorter program is available.
2 Program is also offered in French.
Tn Technician (4 semesters).
Tques Technique (2 semesters or less).
Ty Technology (6 semesters).
A Program is active P Program is possible.
* Program is offered at the college indicated.

		Algonquin (Ottawa)	Algonquin (Pembroke)	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern (S. Porcupine)	Northern (Kirkland L.)	Northern (Haileybury)	St Clair	St Lawrence (Kingston)	St Lawrence (Brockville)	St Lawrence (Cornwall)	Sault	Seneca	Sheridan	Sir S. Fleming (Peterborough)	Sir S. Fleming (Lindsay)
446	Welding Eng Tn						*1												*										
447	Welding Eng Ty																												
448	Welding (Fabrication) Tn						(2)																						
449	Welding Specialist Eng Tques										*														*				
450	Yachting Studies Ty												*																

Short Programs

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St Clair	St Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
451	**Academic Improvement**																							
452	Basic Training for Skill Development (BTSD) – Level I	36	A	A	A		A	A	A	A	A		A		A	A	A			A	A		A	P
453	Basic Training for Skill Development (BTSD) – Level II	24	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
454	Basic Training for Skill Development (BTSD) – Level III	32	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
455	Basic Training for Skill Development (BTSD) – Level IV	32	A	A	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
456	English as a Second Language	24	A	A	A	A	A	A	A	A	A	A	A	A		A	A	P	A	A	P	A	A	
457	English as a Second Language (Advanced)	16		A	A					A		A								A		A		
458	English for Provisional Tradesmen	24				A					A					A								
459	English for Science & High Technology	12									(A)									P				
460	French as a Second Language	24	A																					
461	Preparation for Certificate of Qualification	10				A										A		P						P
462	**Artistic, Literary, Performing Arts & Related**																							
463	Commercial Art / Graphic Computer Typesetting	40									A					A								
464	Floral Design (Basic)	16		A																				
465	Jewellery: Precious Metal Grinder & Polisher	48									A													
466	Screen Process Printing	40				A					A							P						
467	Sign Writing	40		P							A					P								
468	**Clerical & Related**																							
469	Accountancy Assistant (Accounting Clerk)	40	A	A	A					A	A	A	A	A			A	A	A		A			
470	Bookkeeper-Typist (Bookkeeping Clerk)	35	A	A	A		A	A	A	A	A	A	A			P		A	A		A	A	A	A
471	Business Machines	12														P		A					A	A
472	Business Machines & Bookkeeping / Business & Commerce	40		A		A										P		A			A			A
473	Clerk-Typist	40	A	P	A	A	A			A	A	A	A	A	A	A	A	A	A			A	A	A
474	Commercial Clerical	40	A	A	A	A									A	P		A						A
475	Commercial Refresher	20	A	A	A	A		A		A	A	A	A	A	A	A	A	A	A		A	A	A	A
476	Data Entry Operator	24		P							A		A					P						P
477	Finance Clerk	24																						
478	Hotel Front Office & Reception	12		P							A					P								
479	Insurance Clerk	20		P																				
480	Inventory Control, Auto Parts / Production Planning	24		P	A	A	A									A		A			A			

Legend

(2) Program is new or pending approval or dormant.
2 Shorter program is available.
2 Program is also offered in French.
2 Program is bilingual.
A Program is active. P Program is possible.

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St Clair	St Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
481	Legal Secretary	52				A	A															A		P
482	Medical Secretary	52				A	A															A		P
483	Medical Terminology	14				A										A								
484	Programmer (Junior)	52			A						A				A					A		A		
485	Receptionist-Typist	40			A	A						A						A	A			A	A	
486	Secretary – Machine Transcription (Dicta-Typist)	35	A	A		A	A			A	A	A	A			P		A	A			A	A	A
487	Secretary – Shorthand (Stenographer, General)	40	A	P	A	A	A			A	A	A	A		A	A	A	A	A	A	A	A		A
488	Systems Analyst (Junior)	30																	(A)					
489	Teller / Cashier	12		A			A			A			A			A		P			A	P	P	
490	Travel Counsellor	32		A												A								
491	Typing Refresher	12	A	A		A		A							A	P		A			A	A	A	A
492	Word Processing	30	A	A							A	A		A		A		P	A	A	A	A	A	
493	**Community Services & Related**																							
494	Correctional Worker	34																		P				
495	Family Care Worker	26																				A		
496	Nursery Aide	16									A													
497	Ontario Native Education (Community Improver)	40																A						
498	Orientation to Home Support – Level II	4		(A)			(A)																	
499	Orientation to Homemaking	4									A												A	
500	Rehabilitation Through Education	12									A											A		
501	Visiting Homemaker (Certified) / Home Support Worker	12	A				A											A		A				A
502	**Construction Trades**																							
503	Back-Hoe Operator	4								A													A	P
504	Bricklayer (Pre-Apprenticeship)	48			A						A						A							
506	Cabinetmaking (Basic Fundamentals)	48	A							A		A	A					P						
506	Carpenter, Basic	20					(A)																	
507	Carpenter, General	40		A			A		A	A	A	A		A	P	A	A	A			A			A
508	Carpet Layer	16	P												P									
509	Construction Assistant	38													P									
510	Construction Rod Placer	8														A								
511	Construction Trades Helper	16										P			P	A		A			A			P
512	Decompression (Hyperbaric) Chamber Operator	1																				(P)		
513	Dry-Wall (Taper & Boarder)	8							A						P						A			P
514	Environmental Horticulture I & II[7]	20 / 20							A													(P)	A	
515	Industrial Electronics for Journeymen	13									A							A						
516	Industrial Maintenance Mechanic: Light Equipment	48					(A)																	
517	Industrial Maintenance Mechanic: Packaging / Assembly / Repair / Controls	48		A			A	A	A	A			A	P	A	A		A	A	A	A	A	A	P
518	Masonry	20		A							A	A		P	P			P	A		A			A
519	Natural Gas Servicer / Gas Fitter	26		A	A						A					A								
520	Oil Burner Service	20		A	P						A													
521	Painting & Decorating	16			P					A	A	P			P									P
522	Pipeline Welding	8		P																	A		A	
523	Refractories Training (Bricklaying)	3															A							
524	Refrigeration & Air conditioning	34	A								A								A					
525	Residential Siding Installer	8												P										

7. Only Part I is possible at Seneca College.

Legend
(A) Program is new or pending approval or dormant.
A Program is active. P Program is possible.

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St Clair	St Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
526	Smooth Surface Floor Covering	8													P									
527	Underwater Skills	34																				A		
525	**Disabled**																							
529	Head Start for the Hearing Impaired	12									A													
530	Training for the Handicapped Adult	40														A								
531	**Farming, Agriculture, Horticulture, Animal Care, Fishing, Floriculture**																							
532	Farm Equipment Mechanic (Pre-Employment)	40								A														
533	Farrier	15																				A		
534	Fishing (Commercial)	12										A												
535	Floral Design	9 + 16																				A	A	
536	Horticulture & Gardening / Environmental Horticulture	40							A															
537	Management of Farm Business	5		P	A					A		A												P
538	Trapping (Fur)	12																P						
539	**Health (Allied)**																							
540	Health Care Aide	16	A	A		A		A		A	A				A	A	A	A	A	A	A		A	
541	Hospital Orderly Training	20	A					A	A								A							
542	Nursing Assistant	36					A					A					P	A		A			A	
543	**Machining & Related**																							
544	Electronics (General Servicing)	48						A					A											
545	Electronics (Numeric Control Machine Servicing)	48											A						A					
546	Fabricating & Welding (Metal)	48	A	A												A					A			
547	Forestry Fliers	40																A						
548	Forestry Millwright	48																A						
549	Industrial Mechanic / Millwright	40						A												A			A	
550	Lathe Operator	12											P		A	A								P
551	Machine Shop	40			A				A	A	A	A	A		A	A	A	A	A	A	A	A	A	A
552	Machine-Tool Setter Operator[8]	48					A												A					
553	Machine-Tool Setter Operator (Automatic Screw Machines)	48											A						A					
554	Machinist, General	40																		A			A	
555	Metal Fabrication	40																						P
556	Mould Making	48																	(A)					
557	Numerical Control – Machine-Tool Programmer	10					(A)																	
558	Numerical Control – Machine-Tool Setter Operator	20					(A)																	
559	Welding, Layout Fitting	48																	A				P	
560	Welding Fitter	40		A	A		A	A	A	A	A	A	A	A	A	A	A	A		A	A		A	A
561	Welding Fitter Refresher	20		A					A		A		A	A		A							A	P
562	Welding Operator	20		A					A	A	A		A	A	A	A		P	A	A			A	
583	**Managerial, Administrative & Related**																							
564	Computer Programmer	52										A											A	
565	Ontario Native Education (Indian Band Management I, II, III & IV)	12												A				P						
566	Small Business Management	36				A												P						
587	**Material Handling & Related**																							
568	Heavy Equipment Operator	12		A														P			A		A	P
569	Loader Bulldozer Operator	4																P					A	
570	Sideboom Operator	5																					A	

8. Six separate courses include: Engine and Turret Lathes, Milling and Grinding Machines, Horizontal and Vertical Boring Machines.

Legend
(2) : Program is new or pending approval or dormant.
Tn : Technician (4 semesters).
Tques : Techniques (2 semesters or less).
A : Program is active. P : Program is possible.

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St. Clair	St. Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
571	Tower & Mobile Crane Operator	8																					P	
572	**Mining & Quarrying**																							
573	Diamond Drill Operator (Surface & Underground)	20																A						
574	Drilling & Blasting	3		P																				A
575	Mining Assistant	34																P						
576	**Natural Sciences, Engineering & Mathematics**																							
577	Blueprint Reading: Construction / Mechanical	8		A	P	A	A									P			A				A	P
578	Computer Software	52																		A				
579	Design Process	52									A													
580	Drafting	40		A		A	A		A		A		A			A	A		A	A		A	A	P
581	Drafting, Machine-Tool Detailing	40																	A					
582	Drafting, Mechanical / Electrical	40						(A)																
583	Drafting, Mechanical Engineering	52									A													
584	Drafting, Process Piping	40		A							A			A		A								
585	Drafting Refresher	20			P								A										A	
586	Electrical Drafting	40				A																		
587	Electronic Data Processing I, II & III	8				A																		
588	Electronics (Videotape Recorder)	48									A													
589	Geographical Information Systems	52																						A
590	Machining, Fitting & Welding (Marine Eng / Mechanical Assistant)	24															A							
591	Material Testing	40																						A
592	Numerical Control Machine Programmer	52					A					A	A			A			A					
593	Prospecting Tques	14																P						
594	Quality Control	40			A	A									A	A								
595	Survey Assistant	34			P													P						
596	Technical Assistant	32																						A
597	**Processing**																							
598	Baking Tques	40			A						A								A					
599	Butcher & Meat Cutter	24			A																			
600	Forestry Cutters & Skidders	8						A										A						P
601	Forestry Grader & Scaler	35																A						P
602	Forestry, Mechanical Harvesting	15																A						
603	Forestry Sawyer & Millwright	48																A						P
604	Logging & Small Sawmill Operator	24			A																			P
605	Process Operations	32												A		A								
606	Process Operations, Steel-related Industries	32														A								
607	Retail Meat Cutting	20	A		A		A				A													
608	**Product Fabricating, Assembling & Repairing**																							
609	Aerospace Manufacturing (Aircraft Assembly)	36				A																		
610	Aircraft Maintenance Tn	52				A																		
611	Apparel Design & Pattern Drafting	32				A					A													
612	Appliance Servicing	40		A			A				A			A				P						
613	Automotive Body Repairer	20		P	P																			
614	Automotive Upholstery Trim	8				A																		
615	Avionics	52				A																		

Legend

(2) Program is new or pending approval or dormant.
Tn Technician (4 semesters).
Tques Techniques (2 semesters or less).
A Program is active. P Program is possible.

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St Clair	St Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
616	Business Equipment Servicing	48	A		P						A													
617	Camera Repair Mechanic	40											A											
618	Custom Dressmaking & Alterations	28									A					A								
619	Diesel Electric Mechanic	40				A																		
620	Diesel Engine Mechanic	20				A																		
621	Electric Machine Repair	40																P	A					
622	Electrical Instrumentation Mechanic	40																		P				
623	Electrical Telecommunications Switching Tn	52																		A				
624	Electrical Tn (Accelerated)	40										(A)												
625	Electronics, Basic	36							A															
626	Electronics, Basic Skill	36					A				A													
627	Electronics, Automated Office Systems Servicing	52									(A)													
628	Electronics, Cable Service & Maintenance	48																				A		
629	Electronics, Communications	48			P								A											
630	Electronics, Digital Equipment & Systems	48	A		A						A									A		A		
631	Electronics, Industrial Control	48									A			P	P		A	A						
632	Electronics, Mobile Radio	48							A				A									A		
633	Electronics, Radio / Hi-Fi / Television Servicing	48						A	A	A	A		A	A	A				A			A		
634	Electronics Tn (Accelerated)	36										(A)												
635	Fitter, Structural Steel Plate Work (Pre-Apprenticeship)	40		(A)																				
636	Fluid Power Control Mechanic	40			A	A													A				P	
637	Fork Lift Vehicle Mechanic	40				A			A															
638	Fur Business & Manufacturing Tques / Leather	40									A													
639	Furniture Upholstery & Manufacturing	40				A																		
640	Furniture Upholstery & Repair	40								A	A			A										
641	Furniture, Woodworking & Finishing	32									A			P										
642	Heating / Tn / Services	52	A		A						A								A					
643	Heavy Duty Equipment Mechanic	40		A	A	A		A		A								A			A		A	A
644	Heavy Equipment Field Servicing	12																				P	P	
645	Industrial Electronic Controls – Journeyman	13									A							A						
646	Industrial Maintenance Mechanic	48		A		A	A	A		A						A	A	A	A	A		A	P	
647	Industrial Orientation / Factory	9		P	A				A		A				A								A	
648	Industrial Power Sewing	8									A													
649	Industrial Power Sewing Machine Mechanic	40									A													
650	Instrumentation Mechanic	40									A		A	A		A		P			A			
651	Machine Shop	40	A																	A		A		
652	Marine & Small Powered Equipment Mechanic	40	A	P		A		A					A	A		P		A	P	A				A
653	Marine & Snow Vehicle Maintenance	18				A								A				A		P				P
654	Motor Vehicle Mechanic (Pre-Employment)	40				A				A					P	A		A	A					
655	Motorcycle Mechanic	40				A												P						
656	Plastic Moulding & Set-up Mechanic	20									A													
657	Precision Instrument Mechanic	48											A											
658	Tile & Terrazzo Installer	36 + 4																A						
659	Toolmaking	24														A		A						

Legend
(2) Program is new or pending approval or dormant.
A Program is active P Program is possible

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St. Clair	St. Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
660	**Sales**																							
661	Automotive Merchandising	34				A										A			A					
662	Inventory Control	20		P	A	A				A								P			A			
663	Retail Merchandising	16			A	A															A			
664	Retail Merchandising (Supervisor)	40				P																		
665	Service Station Attendant	24				A												P						
666	**Service**																							
667	Audio Equipment Systems (Electronics)	48									A													
668	Bartending	15	A	P						A	A				A	A		P			A			
669	Building Systems Operator (Mechanical)	40									A													
670	Camp Cook	14																P						
671	Certified Building Custodian	14		A						A								P						P
672	Digital Equipment Systems (Electronics)	48		A	A						A									A				
673	Dining-Room Service	10		P						A	A	A			P	A		P	A					P
674	Fast Food Supervisor	10									A													
675	Food Preparation, Advanced	20	A		A					A	A	A					A	P	A		A			
676	Food Preparation, Basic	20	A	A	A		A	A			A	A			P	A	A	P	A		A			
677	Hairdressing	16																		A	A			P
678	Hairstyling for Barbers	16																		A	P			
679	Hospitality / Administration & Food Service	34																P						
680	Hotel, Front Office & Operation	12		P							A													
681	Tourist Outfitting & Guiding	14																P			A			
682	**Transport Equipment Operating**																							
683	Marine Emergency Duties	3															A							
684	Marine Engineer	28										A					A							
685	Marine Navigator	28						A				A					A							
686	School Bus Driver	2																	(P)					
687	Tractor-Trailer Driver	4		A	P			A			A							P							
688	Transportation of Autos by Carrier (TAC)	4							A															
689	Truck Driver	3		P				A			A										A		P	
690	**Other Crafts & Equipment Operating**																							
691	Graphic Arts Camera Operator	40														A								
692	Knitting Machine Operator	10		(A)																				
693	Lithography & Screen Printing – Layout & Stripping	40														A								
694	Offset Printing	40			A		A				A					A								
695	Ontario Native Education (Sweater Production)	10		A																				
696	Screen Process Printing	40									A													
697	Sheepskin Coat Manufacturing	12		A																				
698	Stationary Engineering (3rd / 4th Class)	40	A	A				A		A	A		A	A		A	A	P	A	A				
699	Stationary Engineering (2nd Class)	40														A		P						
700	**Unclassified**																							
701	Basic Employment Training (BET)	26		A	A		A				A	A				A	A	A	A		A			A
702	Career Planning for Women	6	A	A	A																			
703	Employment Skill Enrichment	32																	(A)					
704	Focus for Change	16																	(A)				(A)	
705	Industrial & Vocational Orientation	9																		A				

Legend

(2) Program is new or pending approval or dormant.
2 Program is also offered in French.
Tn Technician (4 semesters).
A Program is active. P Program is possible.

		weeks max	Algonquin	Cambrian	Canadore	Centennial	Conestoga	Confederation	Durham	Fanshawe	George Brown	Georgian	Humber	Lambton	Loyalist	Mohawk	Niagara	Northern	St Clair	St Lawrence	Sault	Seneca	Sheridan	Sir Sandford Fleming
706	Introduction to Non-Traditional Occupations	8	A	A			A	A	A	A		A		A		A	A	A	A	A	A	A	A	A
707	Job Readiness (BJRT)	12 + 52	A	A	A		A	A		A	A		A	A	A	A	A	P	A	A	A	A	A	A
708	Job Readiness (Probation & Parole)	12			P																			
709	Job-Search Skills for Women	3		(A)																				
710	Laboratory Tn	40													A									
711	Life Skills / Coach	6	A			A												P		A				A
712	Ontario Native Education (Industrial Orientation)	9														A								
713	Ontario Native Education (Job Readiness)	20		A	A									A										A
714	Orientation	3														P		P	A					
715	Pre-Trades Training for Women	12		A										P										
716	Women Into Trades & Technology	18		A	A						A	A				A	A	A	A		A		A	
717	Work Skills & Attitude Training	12			P														A					

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Algonquin College of Applied Arts and Technology

Nepean

President: Dr. Brian Ash

Enrolment 1982-83

Full-time	9 724
Part-time	41 447

Algonquin College primarily serves the Ottawa Valley. It has campuses or centres in Ottawa, Pembroke, Hawkesbury, Renfrew, and Perth, and operates continuing education courses throughout the Valley. Algonquin College has been officially designated as a bilingual college.

Campus locations:

Woodroffe Campus
1385 Woodroffe Ave.
Nepean, Ontario
K2G 1V8

Rideau Campus
200 Lees Ave.
Ottawa, Ontario
K1S 0C5

Col By Campus
281 Echo Dr.
Ottawa, Ontario
K1S 5G2

Heron Park Campus
1644 Bank St.
Ottawa, Ontario
K1V 7Y6

School of Renfrew County
315 Pembroke St. E.
Pembroke, Ontario
K8A 3K2

Ottawa Campus

• Applied Arts

Three-year diplomas
Interior design, museum technology.

Two-year diplomas
Advertising (creative), broadcasting (radio and television), child care worker, commercial art, early childhood education, general arts and science, horticulture and landscaping, law and security administration, library technician, mental retardation counsellor, recreation facilities management, recreation leadership, secretarial translation techniques, social service worker.

Additional admission requirements: usually an interview and a questionnaire; commercial art – portfolio of samples of work and/or test; broadcasting (radio and television), advertising (creative) – comprehension and communications skills test; recreation – record of various recreational activities over several years.

• Business

Three-year diploma
Business administration (options in accounting, data processing, general business, management studies, marketing).

Additional admission requirements: applicants should have four levels of mathematics and language (English or French) both studied at the advanced phase.

Two-year diplomas
Business (options in accounting, data processing, marketing, retail management), finance, hospitality administration and food services, legal assistant, secretarial studies (options in executive, executive bilingual, legal, medical).

Additional admission requirements: business – Grade 11 mathematics recommended; legal assistant – questionnaire and interview; finance – applicants should have four levels of mathematics and language (English or French) with advanced level mathematics studies.

Special one-year certificates
Information processing, secretarial – clerical (dicta-typist and shorthand options), secretarial studies (executive, legal, medical).

Additional admission requirements: information processing – usually post-secondary education or business experience, plus a test.

One-year certificates
Cook training, travel consultant.

Additional admission requirements: travel consultant – questionnaire and perhaps an interview.

Short programs
Baking, bartending, clerical, dining room service, food preparation, junior programmer, retail meat cutting, stenographer legal, word processing.

• Health Sciences

Three-year diplomas
Medical laboratory technology, nursing, respiratory technology.

Additional admission requirements: medical laboratory technology – four levels of academic mathematics, at least one credit in each of physics and chemistry at the senior level are required; respiratory technology – four credits in mathematics, one credit in each of physics and chemisty and a credit in biology is recommended; nursing – senior level of any two of physics, chemistry and biology.

Two-year diplomas
Dental hygiene, health record administration.

Additional admission requirements: dental hygiene – qualified for Ontario certification as a dental assistant and 12 months full-time work experience in the dental field; health record administration – Grade 12 academic mathematics and one of chemistry or biology at the senior level.

One-year certificates
Ambulance and emergency care, dental assistant, pharmacy assistant.

Additional admission requirements: dental assistant – senior level biology, chemistry; pharmacy assistant – Grade 12 mathematics, chemistry plus one other senior level science.

• Technology

Three-year diplomas (technology)
Architectural, biochemical, chemical, computer science, electronic engineering, mechanical engineering, survey.

Additional admission requirements: advanced level mathematics, English or French to Grade 12; architectural technology – one year of drafting (those without may be required to attend a one week preparatory course), questionnaire.

Two-year diplomas (technician)
Architectural (mechanical systems), cartographic (general) and (photogrammetry), computer systems technician, digital electronics engineering technician, electro-mechanical engineering, electronics engineering, fire prevention and industrial safety, graphic arts (printing), industrial instrumentation, photography, survey, toolmaking.

Additional admission requirements: architectural – one year of drafting (those without may be required to attend a one week preparatory course), questionnaire; cartography – colour and Zeiss stereo-vision test; photography – interview and questionnaire; fire prevention and industrial safety – interview.

Special one-year diplomas
Electromechanical engineering technician/drafting, electromechanical engineering technician (precision instruments), electronics engineering technician.

One-year certificates
Business equipment servicing, cabinet making, heating, air conditioning and refrigeration, machine shop, precision metal fabrication, stationary engineer, welding and fabrication, women into trades and technology.

Short programs
Air conditioning and refrigeration, auto body repair, carpenter (general), electronics equipment assembler, industrial woodworking, machine shop, stationary engineer.

School of Renfrew County

Three-year diplomas
Business administration, nursing.

Two-year diplomas
Business, electronics technician, forestry technician, general arts and science, secretarial studies (executive).

One-year certificates
Secretarial studies (dicta-typing and shorthand options).

• Alternative Learning

Continuing education
Algonquin offers over 3000 credit and non-credit courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Pre-employment programs
Contact college for information.

Manpower programs
A large number of programs of one year or less duration are conducted under the sponsorship of Manpower. See college calendar for the identification of such programs and application procedures.

Additional Costs
The estimated cost of books, supplies and instruments for the academic year varies from $40 to $600 depending on the type of program. Please consult the college calendar or phone for more information.

Further Information
For further information on admission requirements and college facilities, please contact
Director of Admissions
Algonquin College of Applied Arts and Technology
1385 Woodroffe Ave.
Nepean, Ontario K2G 1V8
Telephone (613) 725-7432

Registrar
Algonquin College of Applied Arts and Technology
1385 Woodroffe Ave.
Nepean, Ontario K2G 1V8
Telephone (613) 725-7517

For information and application forms for student awards, please contact
Student Service Officer
Algonquin College of Applied Arts and Technology
1385 Woodroffe Ave.
Ottawa, Ontario K2G 1V8
Telephone (613) 725-7210

For further information on Manpower programs offered in Arnprior, Hawkesbury, Ottawa, Pembroke, Perth or Renfrew inquire at the local Canada Employment Centre or Algonquin College.

Cambrian College of Applied Arts and Technology

Sudbury

President: Glenn N. Crombie

Enrolment 1982-83

Full-time	3 182
Part-time	16 000

Cambrian College has two modern campuses within the city of Sudbury. The main New Sudbury Campus, in the city's northeast corner, houses technology labs, a dental clinic and lecture halls. The Regent Street Campus offers health science programs, (other than dental), and features extensive laboratory facilities. Numerous other sites throughout the Districts of Sudbury and Manitoulin accommodate both full programs and individual courses.

Campus locations:

1400 Barrydowne Rd.	885 Regent St. S.
Sudbury, Ontario	Sudbury, Ontario
P3A 3V8	P3E 4T2

Programs Offered

• Arts and Science – General and Applied

Three-year diplomas
Visual arts, music.
Additional admission requirements: music – audition and placement test to determine musical aptitude.

Two-year diplomas
Animation communautaire, audio-visual technician/*technicien en audio-visuel*, child care worker/*techniques d'éducation spécialisée*, early childhood education/*éducation des petits*, general arts and science, journalism, law clerk, law and security administration/*administration de la loi et de la sécurité*, mental retardation residential counsellor, music, social services/*services sociaux, techniques d'éducation pour les déficients mentaux*.
Additional admission requirements: audio-visual technician – senior credit in mathematics, English; child care worker, early childhood education, law and security, mental retardation residential counsellor, law clerk – questionnaire; social services – should be 19 years of age, questionnaire; *services sociaux* – should be 18 or 19 years of age; music – audition and placement test to determine musical aptitude.

• Business

Three-year diplomas
Accounting/*comptabilité*, business administration/*administration des affaires*, data processing/*informatique*, marketing.

Two-year diplomas
Accounting/*comptabilité, informatique*, marketing, secretarial/*secrétariat* (executive/*bilingue de direction*, legal/*juridique*, medical/*médical*).

One-year certificate
General secretarial/*secrétaire de direction*.
Additional admission requirements: secrétaire de direction – 40 wpm and senior credit in office practice.

• Health Sciences

Three-year diplomas
Medical laboratory technology, nursing/*science infirmières*.
Additional admission requirements: medical laboratory technology – two senior credits in English, two senior credits in mathematics, chemistry, and either physics or biology, questionnaire and visitation report; nursing/*sciences infirmières* – two senior credits in English, one senior credit in mathematics, one senior credit in chemistry, one senior credit in biology (plus two senior credits in français, *sciences infirmières* only), and questionnaire.

Two-year diplomas
Dental hygiene (two semesters following a two-semester dental assistant certificate program), radiography/*radiographie*.
Additional admission requirements: dental hygiene – graduation from a recognized dental assistant program or certification as a dental assistant in Ontario, one year of working experience as a dental assistant, questionnaire; radiography/*radiographie* – two credits in advanced level mathematics from years three and/or four, two credits in advanced level language from years three and/or four, one credit in advanced level physics and biology or chemistry in years three or four, two additional science credits at the advanced or general level in any year, questionnaire/report, and interview.

One-year certificates
Ambulance and emergency care/*soins ambulanciers*, dental assistant.
Additional admission requirements: ambulance and emergency care/*soins ambulanciers* – two senior credits in science (biology and either chemistry or physics preferred), questionnaire, Ontario driver's licence – Class "F" recommended, a valid Red Cross or St. John's Ambulance First Aid Certificate recommended, and good level of physical fitness; dental assistant – two senior credits in sciences, one of which must be biology and the other preferably chemistry or physics, questionnaire and report.

• Technology

Three-year diplomas
Chemical technology (second year options in environmental biology and industrial hygiene), civil engineering technology/*technologue en génie chimique*, electronics engineering/*technologue en génie électronique*, geological engineering, metallurgical engineering, mining engineering, power (stationary) engineering.
Additional admission requirements: two credits in senior English, two credits in mathematics, credits in chemistry and physics with a 60% average for advanced level work or 70% for general level work (except for power (stationary) engineering which requires two credits in senior level English, two credits in senior level mathematics, chemistry or physics, chemical technology/*technologue en génie chimique*, and metallurgical engineering which require senior level English, mathematics, physics and chemistry plus senior level français for *technologue en génie chimique* only and electronics engineering/*technologue en génie électronique* which require two senior mathematics and English, and one senior physics credit plus senior français for *génie électronique*). Entrance into the options is based on first year performance.

Two-year diplomas (technician)
Chemistry, civil engineering/*génie civil*, electrical engineering, electronics engineering/*génie électronique*, geological engineering, industrial

instrumentation/*instrumentation industrielle*, metallurgical engineering, mining engineering.

Additional admission requirements: chemical, metallurgical engineering – senior English, senior mathematics, senior chemistry, senior physics; civil engineering/*génie civil* – senior English and mathematics, senior physics (plus senior français for *génie civil*); electronics engineering/*génie électronique*, electrical engineering, industrial instrumentation/*instrumentation industrielle*, – two senior English and mathematics, physics (plus two senior français credits for French programs only); geological engineering and mining engineering – senior English, mathematics and physics or chemistry.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section and college calendar for further details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Cambrian offers a wide range of credit and non-credit courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact the colleges for an up-to-date list of course offerings.

Additional Costs
Audio-visual/*audio-visuel* – single-lens reflex camera which costs approximately $300, and about $200 for supplies.

Child care/*tech. d'éduc. spécialisée*, social services/*services sociaux*, mental retardation, *tech. d'éduc. déficients mentaux*, early childhood education/*éducation des petits* law clerk – approximately $100 for field-placement trips, personal expenses.

Electrical, electronics/*électronique* and industrial instrumentation/*instrumentation industrielle* – $60 for lab projects which students retain.

Fine arts – approximately $300 per year for books and art supplies.

Chemistry/*génie chimique* and metallurgy – $25 refundable fee per year for breakage.

Ambulance and emergency care and *soins ambulanciers* – $250 for books, safety shoes, uniforms, gym attire, physical examination, first aid courses and MTC examination.

Further Information
For further information, please contact
Registrar
Cambrian College of Applied Arts and Technology
1400 Barrydowne Rd.
Sudbury, Ontario P3A 3V8
Telephone (705) 566-8101

Canadore College of Applied Arts and Technology

North Bay

President: Murray Hewgill

Enrolment 1982-83

Full-time	2 325
Part-time	6 920

While its primary responsibility is to serve the district of Nipissing, Canadore College also attracts students from across the province. The main campus, the College Education Centre (which Canadore shares with Nipissing University College), Canadore Downtown, the Canadore Technology Centre and the Heliport Campus are the four major facilities in North Bay. The Sturgeon Falls office co-ordinates college programming in West Nipissing while individual liaison officers respond to the needs of the people of Mattawa and area.

Campus locations:

College Education Centre
1300 Gormanville Rd.
Box 5001
North Bay, Ontario
P1B 8K9

Downtown Campus
168 First Ave. E.
Box 5001
North Bay, Ontario
P1B 8K9

Canadore Technology Centre
Commercial St.
P.O. Box 5001
North Bay, Ontario
P1B 8K9

Sturgeon Falls Office
162 King St.
Sturgeon Falls, Ontario
P0H 2G0

Canadore College Heliport Campus
P.O. Box 5001
North Bay, Ontario
P1B 8K9

Programs Offered

Bilingual programs require verbal and written fluency in both English and French.

• Arts and Science – General and Applied

Two-year diplomas
Broadcasting (radio or television), crafts and design (part-time through general arts and science), general arts and science, graphic communications, journalism (print), recreation leadership.

Additional admission requirements: senior level English; broadcasting (RTV) – diagnostic testing, group information session.

Short programs (certificate)
Baking techniques, basic employment training, basic job readiness training, basic training for skill development, career planning for women, cottage industry (native): duffle coat production, English as a second language, food preparation (general) – basic and advanced, retail meat cutting, women into trades and technology.

Note: Many of the short programs are offered on a self-paced, individualized instruction mode.

Additional admission requirements: short programs normally require Grade 10 English (or French) and math, an interview with the faculty.

• Business

Three-year diplomas
Business administration/*administration des affaires*, accounting, data processing, marketing.

Additional admission requirements: senior level English (or French) and Grade 11 mathematics at the advanced or general level preferred; data procesing – Grade 12 mathematics required.

Two-year diplomas
Accounting, office administration, business (general), *gestion des affairs*, hotel, resort and restaurant management/*gestion hôtelière*, legal assistant, food service supervision.

Additional admission requirements: senior level English (or French) and Grade 11 mathematics at the advanced or general level preferred; hotel, resort and restaurant management/*gestion hôtelière* – proof of a recent tuberculin test; food service supervision – chemistry preferred, proof of a recent tuberculin test required.

One-year certificate
Secretarial (options in dicta typist/*dicta typie*, executive/*de direction*, legal, medical, stenographer/*stenographie*).

Additional admission requirements: executive/*de direction*, legal, medical – 40 wpm typing and a course in business or office practice. Legal secretary also requires 80 wpm shorthand. Applicants who cannot meet this requirement should first complete the one-year dicta typist/*dicta typie* course or the one-year stenographer/*stenographie* course.

Short programs (certificates)
Accountancy assistant, bilingual secretarial, bookkeeper clerk, clerk typist, commercial refresher, receptionist, retail merchandising, secretary (shorthand).

Note: Many of the short programs are offered on a self-paced, individualized instruction mode.

Additional admission requirements: short programs normally require Grade 10 English (or French) and math and an interview with the faculty.

• Health Sciences

Three-year diplomas
Biological technician/technologist (environmental), medical technology (laboratory).

Additional admission requirements: Preference will be given to applicants with English and mathematics and two of biology, chemistry and physics preferably at the advanced level in Grades 11 and 12.

Two and one-half year diplomas
Nursing/*sciences infirmières*.

Additional admission requirements: Grade 11 biology and one of physics or chemistry at the advanced or general level of the senior division; complete diagnostic testing and attend a group information session.

Two-year diploma
Food processing technician – industrial and biological technician/technologist (environmental): see "Three-year diplomas" above.

One-year certificates
Dental assistant/*soins dentaires*, dental hygiene, nursing assistant.

Additional admission requirements: dental assistant/*soins dentaires* – Grade 11 biology and one of chemistry or physics, at the advanced or general level of the senior division, completion of diagnostic testing, a manual dexterity test and a written report of a one-day work experience in

a dental office, dental hygiene and nursing assistant – Grade 11 biology and one of physics or chemistry at the general or advanced level of the senior division; dental hygiene – graduate of a dental assistant program or a Certified Dental Assistant.

Short programs (certificate)
Quality control, radiation protection, post diploma psychiatric nursing for nursing assistants (eight weeks).

Additional admission requirements: Post diploma psychiatric nursing for nursing assistants – only a registered nursing assistant, or a nursing assistant graduate is eligible for registration. A personal interview is conducted to determine employment suitability in a psychiatric care facility; radiation protection – candidates must provide written evidence from their employer that they are working in a dental office and are rountinely taking and processing x-rays, under the direction of a dentist.

Note: All health science programs require compliance with the Ontario Public Hospitals Act, or its equivalent in health standards.

• Technology

Three-year diplomas
Computer technology – process control.

Additional admission requirements: Grade 11 mathematics at the advanced or general level required.

Two-year diplomas
Aviation-technician (aircraft maintenance), aviation-technician (avionics maintenance), civil engineering technician (construction), drafting technician, mechanical technician – machine shop operations.

Additional admission requirements: Grade 11 mathematics and physics at the advanced or general level, an interview/briefing session may also be required; civil engineering, drafting technician – preference will be given to students with Grade 12 mathematics and Grade 11 or 12 physics.

One-year certificate
Aviation pilot – rotary (helicopter pilot).

Additional admission requirements: Grade 11 physics, Grade 12 mathematics, applicants must submit evidence of a D.O.T. Flight Medical Certificate Category 1, a fixed wing pilot licence and a summary of Pilot Log Book.

Short programs (certificate)
Auto body mechanic, bricklayer, cabinet making – carpenter general (natives), drafting refresher, fluid power and control mechanic – heating technician, inventory control (automotive parts merchandising), machine shop, offset printing, sawmill operator and maintenance, structural steel, survey assistant, welding fitter.

Note: Many of the short programs are offered on a self-paced, individualized instruction mode.

Additional admission requirements: short programs normally require Grade 10 English (or French) and math, interview with the faculty.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult college calendar for further details.

Continuing education
Many of Canadore's full-time regular programs may also be taken on a part-time basis during the day or in the evening. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact the Chairman of Part-Time Studies at Canadore Downtown for further details.

Further Information
For further information on admission requirements and details about programs and facilities at Canadore College, and for information and application forms for student awards and loans, please contact
Registrar
Canadore College of Applied Arts and Technology
P.O. Box 5001
North Bay, Ontario P1B 8K9
Telephone (705) 474-7600 ext. 2211, 2113, 2123, 2131, 2132 or if calling from outside the North Bay local calling area, please call, toll-free, 1-800-461-9513 from area codes 705, 416, 519, 613 only.

For further information and application forms for student residences, please contact
Residence Manager
College Education Centre Residence
P.O. Box 5005
North Bay, Ontario P1B 8L7
Telephone (705) 474-1550

Centennial College of Applied Arts and Technology

Scarborough, East York

President: I.Bev McCauley

Enrolment 1981-82

Full-time	5 929
Part-time	11 943

Centennial College, serving Metro Toronto, Scarborough, and East York is Ontario's first community college and is comprised of four large campuses – Ashtonbee (industrial robotics, aircraft, and motive power programs); East York (business administration, secretarial science, college preparatory, and English as a second language programs); Progress (engineering technology, business administration, and secretarial science programs); Warden Woods (health sciences, communications, hospitality, consumer services, community services, and general arts and science programs).

Centennial College offers more than 85 programs for full-time students. In addition, a wide range of part-time and evening courses are available through the Continuing Education Division throughout the year. Many individually designed programs for local business and industrial firms are offered by the Client Services Department, while Centennial's own Conference Centre is responsible for coordinating and sponsoring a variety of public and client seminars.

Campus Locations:

Warden Woods
651 Warden Ave.
(south of St. Clair)
Scarborough, Ontario

East York
951 Carlaw Ave.
(Pape and Mortimer)
Toronto, Ontario

Ashtonbee
75 Ashtonbee Rd.
(Warden and Eglinton)
Scarborough, Ontario

Progress
41 Progress Court
(401 and Markham Rd.)
Scarborough, Ontario

Career Search: Career Search is a series of information days organized by and held at Centennial College. Individuals or high school groups interested in participating may contact the Liaison Office. Requests for career information and calendars should also be directed to the Liaison Office.

Programs Offered

• Arts and Science – General and Applied

Three- and two-year diplomas
General arts and science (clusters in general studies, science studies, and visual arts).

Three-year diplomas
Communications (programs in creative advertising, journalism – print, broadcasting; radio and TV), community services (child care worker), consumer services (hospitality administration op-

tions in restaurant and catering, hotel and resort, travel and tourism).

Additional admission requirements: orientation counselling, diagnostic/achievement test in English; communications – 500-word essay written at Centennial.

Two-year diplomas
Communications (options in book editing and design, organizational communications), community services (programs in correctional worker, early childhood education, mental retardation counsellor, recreation leadership, social service worker), consumer services (programs in fashion merchandising, home furnishings – merchandising, food service supervisor, travel counsellor).

Additional admission requirements: orientation counselling, diagnostic/achievement test in English; organizational communications – 500-word essay written at Centennial.

One-year certificate
General arts and science (visual arts cluster).

17-week program (1 semester)
Cosmetic retailing (17 weeks).

Additional admission requirements: Grade 10 or mature student status, participation in orientation counselling, ability to correctly identify colours.

• Business

Three-year diploma
Business administration (options in accounting and financial management, general management, marketing management, production and operating management, computer programmer/analyst).

Additional admission requirements: diagnostic/achievement tests in English and mathematics.

Two-year diplomas
General business (options in accounting, data processing, general studies, legal assistant, marketing), secretarial science (options in executive, legal, medical – all options include word processing).

Additional admission requirements: diagnostic/achievement test in English; general business – diagnostic/achievement test in mathematics.

One-year certificates
Computer programming, secretarial science (options in executive, general, legal, medical – all options include word processing), word processing operator (17 weeks duration).

Additional admission requirements: diagnostic/achievement test in English; computer programming – orientation counselling, diagnostic/achievement test in mathematics and computer aptitude test; executive and legal secretarial – 45 wpm typing and 80 wpm shorthand; medical secretarial – 45 wpm typing; word processing operator – 45 wpm typing and an English test.

Short programs
Bookkeeper typist (35 weeks), clerk typist (40 weeks), office information administrator (52 weeks).

Special admission requirement: successful completion of a business mathematics and communications test.

• Health Sciences

Two and one-half year diploma
Nursing.

Additional admission requirements: two senior level sciences (biology preferred) with satisfactory marks (percentage guidelines are assessed as 60% at the advanced level and 70% at the general level), satisfactory score in a diagnostic/achievement test in English, and mathematics, orientation counselling, letters of reference (upon request), medical doctor's certificate, demonstrated fluency in English.

One-year certificate
Ambulance and emergency care.

Additional admission requirements: same as for nursing plus a Class "G" Ontario driver's licence.

Note: Before undertaking this program, the applicant should be aware that under the provisions of the Ambulance Act (1975), employment as an ambulance attendant is prohibited to any individual who:
a) in the past year has received six or more demerit points on the driving record by the Registrar of Motor Vehicles; or
b) has had a driving licence suspended in the previous two years; or
c) has been prohibited from driving under the Criminal Code of Canada within the past three years; or
d) has ever been convicted of any crime involving moral turpitude for which he/she has not been pardoned.

Graduates of this program are required by Ministry of Health regulations to qualify as Emergency Medical Care Assistants (EMCA).

• Technology

Three-year diplomas (technology)
Architectural (drafting option in third year for students who have successfully completed the two-year architectural technician program), biological (industrial microbiology), chemical engineering (industrial), civil engineering (option in public works), computer systems technology, electronics engineering (options in control systems, electronics), fluid power and robotics (hydraulics, robotics, and pneumatics), mechanical engineering (options in industrial and mechanical design).

Additional admission requirements: Grade 11 and 12 mathematics (business mathematics excluded), Grade 12 English; architectural, fluid power*, civil, mechanical engineering – Grade 11 physics; biological (microbiology) – Grade 11 or 13 biology, Grade 12 or 13 chemistry; chemical engineering – Grade 12 or 13 chemistry, Grade 11 or 13 physics or biology (physics recommended); electronics engineering – Grade 11 physics, one other senior level science course.

Two-year diplomas (technician)
Architectural (drafting), automotive (technical, administration)*, biological (industrial microbiology), chemical engineering (industrial), civil engineering (option in public works), electronics engineering, fluid power, industrial instrumentation (process measurement and control), mechanical engineering (options in industrial, mechanical design).

Additional admission requirements: same as for the three-year programs; industrial instrumentation – Grade 11 and 12 mathematics (business mathematics excluded), Grade 12 English, chemistry, Grade 11 physics.

Metal Machining Program (two-year)
Options in industrial machinist, mould maker, tool and die maker.

Special admission requirements: individual assessment.

Technician programs (52 weeks)
Industrial robotics, avionics maintenance specialist (aviation electronics), aircraft maintenance technician.

Additional admission requirements: Grade 11 and 12 mathematics, Grade 11 physics and successful completion of a mathematics and English test.

Technician programs (64 weeks)
Electronics engineering technician, instrumentation engineering techician.

Additional admission requirements: electronics – Grade 12 English, Grade 11 and 12 mathematics (business mathematics excluded), Grade 11 physics, one other senior level science course; instrumentation – Grade 12 English, Grade 11 and 12 mathematics (business mathematics excluded) Grade 11 physics, Grade 12 chemistry.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult college calendar for details.

Special admission requirement: diagnostic test.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section. Candidates interested in registering in an apprenticeship program *should not apply* to Centennial College but instead should contact their local Apprenticeship Branch. Candidates to other Centennial programs should apply to the college in the normal manner.

Continuing education
Centennial College offers more than 500 credit and non-credit courses. These courses are primarily offered on a part-time studies basis. Students may seek admission to courses which start in September, January, and May of each year. The Continuing Education Division also provides special educational services to profesional and other interest groups. For brochures and specific information, call 694-3345.

Pre-employment programs
Aircraft maintenance technician, avionics maintenance specialist.

Additional admission requirements: Grades 11 and 12 mathematics, Grade 11 physics, mathematics and English test.

Aerospace manufacturing

Additional admission requirements: Grade 11 including mathematics, communication skills.

Electric power production mechanic, heavy-duty equipment mechanic, marine and small powered equipment mechanic.

Special admission requirement: Grade 10.

*Candidates who lack the necessary requirements may receive special admission orientation counselling.

Further Information
For further information regarding programs, college facilities and also career search visits of the campuses, please contact
The Liaison Office
Centennial College of Applied Arts and Technology
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 694-3241 ext. 302/319

Applications to Centennial should be directed to
The Admissions Office
Centennial College of Applied Arts and Technology
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 694-3241, ext. 408

For further information regarding financial assistance and related OSAP forms, please contact
Director, Financial Aid
Centennial College of Applied Arts and Technology
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 439-7180, ext. 255

Conestoga College of Applied Arts and Technology

Kitchener

President: Joseph H. Martin

Enrolment 1982-83

Full-time	4 171
Part-time	25 000

Conestoga College serves the communities in the four counties Waterloo, Wellington, Perth and Huron. Within this midwestern Ontario region, the college provides a selection of educational programs specifically designed to prepare people for occupations in business, industry and health and community services. Three programs, manufacturing technician (wood products), materials management, and welding engineering technician, are unique in Ontario. In addition, specialized programs in metal machining and numerical control are offered.

Campus locations: Conestoga College campuses are located in Cambridge, Clinton, Doon (Kitchener), Guelph, Stratford and Waterloo. Diploma programs are offered at Doon, Guelph, Stratford and Waterloo. Certificate programs and part-time studies are offered at all campuses.

Programs Offered

• Arts and Science – General and Applied

Three-year diplomas
Broadcasting (radio and television), design (graphic and advertising), journalism (print) (80 weeks).
Additional admission requirements: broadcasting (radio and television) – aptitude test, interview and portfolio; design (graphic and advertising) – Grade 12 English, interview and portfolio of art and/or design related work; journalism (print) – Grade 12 English, academic strength in English.

Two-year diplomas
Law and security administration, early childhood education, recreation leadership, social services.
Additional admission requirements: law and security administration, recreation leadership – Grade 12 English, questionnaire and interview; early childhood education – Grade 12 English, questionnaire, interview, satisfactory medical record; social services – 19 years of age by August 31 of current academic year, questionnaire and interview.

• Business

Three-year diplomas
Business administration (accounting, management studies, marketing), materials management.
Additional admission requirements: business administration (accounting, management studies, marketing) – Grade 12 English, Grade 12 mathematics; materials management – Grade 11 mathematics, strength in mathematics.

Two-year diplomas
Business (accounting and computer programmer/analyst), food and beverage management.
Additional admission requirements: business (accounting and computer programmer/analyst) – Grade 12 English and mathematics; food and beverage management – Grade 12 English, questionnaire, interview, satisfactory medical record.

One-year certificate
Clerk typist, bookkeeping typist, secretary (machine transcription, shorthand).
Additional admission requirements: completion of the college administered achievement test(s).

• Health Sciences

Diploma nursing.
This is a 93 week program leading to a diploma in nursing.
Additional admission requirements: one Grade 11 or 12 course in biology and one in physics or chemistry, questionnaire and interview. For successful achievement in the program, it is desirable that the applicant have a background and aptitude for the sciences of biology, chemistry and physics, along with senior level English, family studies, basic mathematics and communications skills. Applicants must meet the medical criteria.

One-year certificate
Ambulance and emergency care.
Additional admission requirements: Ontario driver's or class "F" licence, questionnaire and interview. Applicants must meet the medical criteria.

• Technology

Three-year diplomas (technology)
Civil engineering, construction engineering, electronics engineering (computer systems and telecommunication systems), mechanical engineering.
Additional admission requirements: civil engineering, electronics engineering (computer systems and telecommunication systems) – Grade 12 mathematics, Grade 11 or 12 physics or general science, Grade 11 English; mechanical engineering – Grade 12 mathematics, Grade 11 English, academic strength in mathematics, questionnaire, interview; construction engineering – Grade 12 mathematics, Grade 11 or 12 physics, Grade 11 English.

Two-year diplomas (technician)
Electronics engineering, graphic, manufacturing (wood products), mechanical engineering (drafting), mechanical engineering (hydraulics and pneumatics), welding engineering.
Additional admission requirements: electronics engineering – Grade 12 mathematics, Grade 11 or 12 physics or general science, Grade 11 English, academic strength in mathematics; graphic – interview and portfolio; manufacturing (wood products) – questionnaire and interview; mechanical engineering (drafting) – Grade 12 mathematics, academic strength in mathematics, Grade 11 English, questionnaire, interview; mechanical engineering (hydraulics and pneumatics), welding engineering – Grade 11 mathematics, English, and physics, academic strength in mathematics and physics.

Certificate programs
Conestoga College offers a number of certificate programs that vary in length from eight to 48 weeks. Consult the current college calendar or contact the Career Services Office for details of these programs.

• Alternative Learning

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Manpower programs
Contact college for information.

Further Information
For additional information, please contact
Career Services
Conestoga College of Applied Arts and Technology
299 Doon Valley Dr.
Kitchener, Ontario N2G 4M4
Telephone (519) 653-2511 ext. 279, 366

Confederation College of Applied Arts and Technology

Thunder Bay

President: B.E. Curtis

Enrolment 1982-83

Full-time	2 650
Part-time	6 000

Confederation College serves the communities of Northwestern Ontario covering an area as far west as the Manitoba border, east to White River and north to James Bay.

Campus locations: The main Confederation Campus is situated in Thunder Bay. Off-campus locations in Thunder Bay house the health sciences and aviation programs. Many manpower and continuing education programs are offered in numerous locations including Atikokan, Dryden, Kenora, Fort Frances, Geraldton and others.

Programs Offered

• Arts and Science – General and Applied

Two-year diplomas
Broadcasting (radio and TV), child care worker, community gerontology, early childhood education, film production, general arts and science, general arts and science – photography, law and security, mental retardation counsellor, performing arts management, recreational leadership, social services.

Additional admission requirements: child care worker – supplemental admission form and interview; early childhood education – supplemental admission form, a medical prior to commencing classes is recommended, interview with Early Childhood Education Coordinator may be required; law and security administration – (four semesters), supplemental admission form; performing arts management – related experience preferred, supplemental admission questionnaire, references, possible interview; recreational leadership – supplemental admission form, personal interview if required; social services – supplemental admission form, admissions interview.

One-year certificates
Law and security administration, native alcoholism worker, native community worker.

Additional admission requirements: law and security administration – (two semesters), supplemental admission form; native community worker – (five semesters), complete student information form, meeting with Program Coordinator or designate.

• Business

Three-year diplomas
Accounting and finance, data processing, personnel and industrial relations.

Additional admission requirements: satisfactory standing in first semester core subjects; business data processing – years 3 and 4 general or advanced level mathematics.

Two-year diplomas
Business general, administration option, marketing option, hotel management, secretarial arts (executive, legal, medical), travel/tourism administration.

Additional admission requirements: secretarial arts (executive, legal, medical) – successful completion of secretarial arts certificate program or requirements listed below.

One-year certificate
Secretarial arts (executive, legal, medical).

Additional admission requirements: executive secretarial – 40 wpm typing and 80 wpm symbol or alphabetic shorthand; legal secretarial – 40 wpm typing, 80 wpm symbol shorthand or legal machine transcription test in lieu of shorthand; medical secretarial – 40 wpm typing.

• Health Sciences

Two and one-half year diploma
Nursing.

Additional admission requirements: credits from two different science subjects from year 3 or 4 to be selected from chemistry, biology or physics, credit in year 2 mathematics, interviews, testing and recommendations may be required.

Two-year diplomas
Dental hygiene, radiography.

Additional admission requirements: dental hygiene – offered in alternating years, certificate in dental assisting from a recognized dental assistant program or eligibility for certification as a dental assistant, manual dexterity test, minimum of B average in dental assistant program, successful interview, recent certificate of good health including a T.B. skin test; radiography – two advanced level mathematics credits from years 3 and 4, two advanced level language credits (English or French) from years 3 and 4, one advanced physics credit from year 3 and/or 4, one advanced level credit in either chemistry or biology from year 3 and/or 4, two other science credits taken at either the advanced or general levels.

One-year certificate
Dental assistant.

Additional admission requirements: credits in year 4 chemistry, year 3 or 4 biology and introductory typing, admission interview, recent certificate of good health including a T.B. skin test.

• Technology

Three-year diplomas
Architectural (design) technologist, civil engineering technology, aviation (manufacturing) technologist, electrical (computer/control) engineering technology.

Additional admission requirements: architectural technologist – credits in year 3 and 4 mathematics (Direct entry into semester 3 requires completion of year 5 with credits in English, algebra, calculus and functions and relations); civil engineering – six semester program for Grade 12 graduates, four semester program for Grade 13 graduates, direct entry into semester three requires completion of Grade 13 with credits in English, algebra, calculus, functions and relations, physics and chemistry; entry into semester one requires credits in year 3 and 4 mathematics, year 3 physics, year 4 chemistry; aviation technologist – credits in year 3 and 4 mathematics and physics; electrical (computer/control) engineering technology – Grade 12 mathematics at advanced level, physics and/or chemistry from year 3 or 4. Business mathematics not acceptable for admission.

Two-year diplomas
Architectural (design) technician, aviation (aircraft maintenance) technician, aviation (avionics/

electronics) technician, aviation (flight) management, aviation (manufacturing) engineering technician, construction engineering technician, electrical engineering technician, electronics engineering technician, instrumentation engineering technician, interior design, mechanical engineering technician, survey technician (co-op program).

Additional admission requirements: year 3 and 4 general or advanced level mathematics (business mathematics not acceptable); aviation (flight) management – M.O.T. medical examination, references and interview; interior design – interview and portfolio upon request.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult calendar for details.

Apprenticeship
See CAAT chart for programs offered and the Apprenticeship section for details.

Continuing education
Confederation offers over 500 credit and non-credit courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and college calendar. Complete details on subject offerings are available in late June of each year.

Manpower programs
Along with upgrading, clerical and stenographic courses, a number of skill programs are offered. Contact the college for further information.

Ontario Management Development Program
This program provides an opportunity for managers, supervisors and small business owners/operators to increase their knowledge and skill. Ontario Provincial certificates are available upon the completion of an appropriate selection of six credits. The two certificates currently available are in Business Management Studies and Supervisory Studies. For more information, contact the Registrar's Office.

Training in Business and Industry (TIBI)
This program is designed specifically to serve the business community by assisting companies in training employees at times and locations best suited to the company's needs.

There are three program areas:

1. If a business has a training need in any skill (non-supervisory) area, the college will develop a course to meet the need, provide a part-time instructor and bring the instructor to the place of business (classes can also be given at the college, or at other premises). TIBI funds will be used to offset a portion of the course costs. All administration is handled by the college.
2. The Cost Recovery Program is geared to helping businesses that are now, or are in the future, considering conducting their own training. If one of the full-time employees of the company serves as an instructor, funding will be supplied to support the training, provided the program meets the college's guidelines.
3. The third program area is Supervisory and Management Training. As provincial government funds cannot be used to support management upgrading, this type of training is conducted on a fee-paying basis. Courses vary in length and may be held in the evening or during the day.

For further information, contact the Industrial Training Department at Confederation College.

Further Information

For further information on admission requirements and details about programs and facilities, please contact

Mr. Joseph A. St. Amand
Associate Registrar – Post-secondary Programs

Ms. Patricia Bain
Community Liaison Officer

Mr. John Zurba
Associate Registrar – Manpower and Special Programs

Mr. R. Armstrong
Placement Officer

Mrs. L. Vollum
Student Awards Officer

Confederation College of Applied Arts and Technology
P.O. Box 398
Thunder Bay, Ontario P7C 4W1
Telephone (807) 475-6110
North Western Ontario residents call toll free at 1-800-465-6961 or 1-800-465-6962.

Durham College of Applied Arts and Technology

Oshawa

President: M.L. Garland

Enrolment 1982-83

Full-time	2 350
Part-time	11 500

Durham College is located in the City of Oshawa. Durham offers a wide selection of programs, five of which are unique: aviation transport and industrial engineering technology, industrial management, legal administration, and sports administration.

Programs Offered

• Applied Arts

Two-year diplomas (with optional third year)
Journalism, public relations, advertising administration, graphic design, interior design and sports administration.

Additional admission requirements: sports administration interior and graphic design – mathematics recommended; interior and graphic design – a basic understanding of art and/or design; interior and graphic design – portfolio required.

• Business

Three-year diplomas
Business administration (data processing, finance and accounting, general, industrial management, marketing), legal office administration, secretarial science.

Additional admission requirements: Grade 12 mathematics recommended. Students wishing to take the three-year program should be aware that it is academically more demanding (particularly in mathematics) than the two-year program.

Two-year diplomas
Business (data processing, finance and accounting, general, marketing, personnel administration) secretarial arts (general, medical, legal, engineering, word processing).

Additional admission requirements: business – Grade 12 mathematics preferred.

One-year certificates
Secretarial arts (basic, engineering, general, legal, medical, word processing).

• Health Sciences

Nursing.
The two and one-half year program leads to a Diploma of Nursing and, upon successful completion of the examinations set by the College of Nurses of Ontario, certification as a registered nurse. Limited enrolment.

Additional admission requirements: senior level chemistry and biology. Preference will be given to permanent residents of the Durham Region when program oversubscribed.

One-year certificate
Nursing assistant.
This program leads to a Nursing Assistant Cer-

tificate and, upon successful completion of the examinations set by the College of Nurses of Ontario, certification as a registered nursing assistant. Limited enrolment.

Additional admission requirements: Mature students whose work experience and personal background indicate a likelihood of success are encouraged to apply. Preference will be given to permanent residents of the Durham Region if program oversubscribed.

Dental assistant.
This program is designed to prepare skilled assistants for employment in dental offices and clinics. Limited enrolment.

Additional admission requirements: senior level credits in chemistry and biology. Preference given to permanent residents of the college area and the areas served by Sir Sanford Fleming and Loyalist Colleges. Forty wpm typing is an asset.

Applications must be accompanied by the applicant's Health Record (medical certificate, chest x-ray, immunization record and dentist's statement of dental health).

Dental hygiene.
This program is designed to train students to the level that will qualify them to write the Royal College of Dental Surgeons registration examination for hygienists. Limited enrolment.

Additional admission requirements: Successful completion of the dental assisting program in an Ontario CAAT, or satisfactory dental assisting experience as a Certified Dental Assistant and a dentist employer's recommendation.

Applications must be accompanied by the applicant's Health Record (medical certificate, chest x-ray, immunization record and dentist's statement of dental health). Preference given to permanent residents of the Durham region and the areas served by both Sir Sanford Fleming and Loyalist Colleges.

• Technology

Three-year diplomas (technology)
Aviation transport and industrial engineering, chemical, civil, computer, electronic and mechanical.

Additional admission requirements: Applicants interested in the three-year engineering technology programs should be aware that they are more demanding than the two-year programs. Grade 12 mathematics required, Grade 12 chemistry and Grade 11 physics are strongly recommended for a three-year technology program. Subjects such as biology, computer science, drafting, electronics, environmental studies, technical report writing, etc., may also provide an adequate background. See calendar for details of direct entry eligibility.

Food and drug technology.
This program trains people to work in the food and drug industry where they will help maintain a high calibre of production standards, as established by government regulations. Graduates of this program will find themselves in responsible positions which offer excellent remuneration and working conditions.

Additional admission requirements: Grade 12 mathematics, senior level biology and chemistry are recommended. Applicants with Grade 13 credits in chemistry, biology, mathematics and English will be considered for direct entry into second year.

Medical lab technology.
Durham College is offering the first year of this three-year program. Successful students will, upon acceptance, complete the second year of the program at the Toronto Institute of Medical Technology, 222 St. Patrick St., Toronto. The third year of the program will be primarily clinical with supervised teaching laboratory experience being given in local hospital laboratories. The first year of this program is common to the food and drug technology program. Consequently, the students in either food and drug technology or medical lab technology have one year in which to make a decision on their future career. Only a limited number of applicants can be accepted for medical lab technology because of the restricted enrolment at the Toronto Institute of Medical Technology. Students wishing to attend the institute will be interviewed before being accepted.

Additional admission requirements: Grade 12 mathematics, senior level biology and chemistry are recommended.

Two-year diplomas
Civil, computer, electronic and mechanical.

Additional admission requirements: Grade 12 mathematics, physics is recommended. Students who have taken electrical/electronic subjects or mechanical/drafting subjects in any year of high school will find these studies a decided asset. A general academic background, coupled with a strong desire to succeed in the technical field of your choice, can be an even greater asset.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Contact Admissions Officer.

Adult training
In addition to upgrading and college preparatory courses, the college offers skill courses and special courses for business and industry. Contact Student Affairs Officer, Simcoe Building, for details.

Continuing education
Along with a variety of non-credit, special-interest courses, Durham offers certificate and diploma program courses on a part-time basis throughout the year. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact Admissions Officer.

Further Information

For further information about admission requirements and details on programs and facilities, please contact
Admissions Officer
Durham College of Applied Arts and Technology
P.O. Box 385
Simcoe St. N.
Oshawa, Ontario L1H 7L7

For information about student awards and loans, please contact
Financial Aid Officer
Durham College of Applied Arts and Technology
P.O. Box 385
Simcoe St. N.
Oshawa, Ontario L1H 7L7
Telephone (416) 576-0210

Fanshawe College of Applied Arts and Technology

London

President: Harry Rawson

Enrolment 1982-83

Full-time	7 542
Part-time	39 444

The Fanshawe College main campus is located in London. The College has six other campuses which serve the counties of Norfolk, Middlesex, Elgin, and Oxford:

Campus locations:

St. Thomas Adult Education Centre
10 Ontario St.
St. Thomas, Ontario
N5P 3N4

Oxford School of Agriculture
RR 3
Woodstock, Ontario
N4S 7V7

James N. Allan Campus
Ireland Rd.
Box 10
Simcoe, Ontario
N3Y 4K4

Schools of Nursing

Victoria Hospital
373 Hill St.
London, Ontario
N6B 1E4

Woodstock General Hospital
305 Wellington St. N.
Woodstock, Ontario
N4S 6S4

St. Thomas Elgin General Hospital
12 Glidden Ave.
P.O. Box 2007
St. Thomas, Ontario
N5P 3W2

Programs Offered

• Arts and Science – General and Applied

Three-year diplomas
Design (co-op) (majors in fashion, interior, industrial, landscape, urban), communications (advertising art, fine art, photography), mathematics and science (co-op) (air-water resources field technology, science laboratory technology).

Additional admission requirements: air-water resources technology, science laboratory technology – Grade 12 English and mathematics, Grade 11 or 12 chemistry and physics.

Two-year diplomas
Communications (majors in audio-visual technician, broadcasting radio, broadcasting television, journalism broadcast, hotel and restaurant management, photography, music industry arts – recording engineering and recorded music production), community services (majors in mental retardation counsellor, social service worker, child care worker, early childhood education), consumer services (majors in general arts and science, law and security administration, law and security – customs major – co-op, legal office administration – co-op, library technician, physical fitness instructor, recreation leadership, tourism and travel counsellor – co-op, urban affairs and real estate – assessment).

Additional admission requirements: early childhood education – Grade 12 English; tourism and travel counsellor – Grade 12 English and Grade 12 French or equivalent.

One-year certificate
Legal office administration.

Additional admission requirements: at least

one year post-secondary education and/or at least two years related work experience.

• Business

Three-year diplomas
Business administration (majors in accounting management, marketing management), business information systems – co-op), secretarial science (major in professional secretarial – co-op).

Two-year diplomas
Business (majors in accounting – co-op, data processing – co-op, marketing – co-op, finance, purchasing, data analysis), secretarial science (majors in legal, medical, executive), farm business management.

Additional admission requirements: executive, legal and medical secretarial (shorthand major) – secretarial arts certificate with stenography major (one year), or OSSGD with 80 wpm shorthand, 50 wpm typing; medical secretarial (dicta-typist major) – secretarial arts certificate (one year), or OSSGD with 50 wpm typing.

One-year certificate
Secretarial arts, word processing.

Additional admission requirements: 40 wpm in typing.

• Health Sciences

Three-year diploma
Medical laboratory technology.

Additional admission requirements: medical laboratory technology (for direct admission to year two) – pre-health science certificate (one year), or first-year science laboratory technology, or Ontario Secondary School Honour Graduation Diploma with Grade 13 English, chemistry and mathematics (preferably relations and functions), biology or physics, and two additional Grade 13 courses preferably of a scientific nature. Grade 12 English (advanced) is also acceptable providing the applicant has a Ontario Secondary School Honour Graduation Diploma.

Two-year diplomas
Dental hygiene, diploma nursing (two 11 month years), radiography, respiratory technology.

Additional admission requirements: dental hygiene – one of: successful completion of CAAT dental assistant program, or Ontario Secondary School Graduation Diploma with Grade 11 or 12 biology and chemistry or the equivalent, plus completion of another dental assistant training program recognized by the Royal College of Dental Surgeons (Ontario), or mature applicant status with appropriate upgrading plus certification or proof of eligibility for certification by the Ontario Dental Nurses and Assistants Association; diploma nursing – two credits in Grade 11, 12 or 13 science (two different sciences preferred); radiography – two credits in Grade 11 and/or 12 advanced mathematics and English, one credit in Grade 11 or 12 advanced physics, one credit in Grade 11 or 12 advanced chemistry or biology, and two other science credits, general or advanced; respiratory technology – Grade 11 or 12 advanced physics, Grade 11 or 12 chemistry and Grade 12 advanced mathematics.

One-year certificates
Ambulance and emergency care, dental assistant, health records technician, nursing assistant, pre-health science.

Additional admission requirements: ambulance and emergency care – Grade 11 or 12 biology or chemistry; dental assistant – Grade 11 or 12 chemistry and/or physics, mathematics, biology (preferably advanced), and 40 wpm typing; health records technician – Grade 12 English, one Grade 11 or 12 science credit, Grade 11 or 12 mathematics or accounting, one year typewriting (25 wpm).

• Technology

Three-year diplomas (technology)
Air conditioning, refrigeration engineering (co-op); architectural (co-op); civil engineering – municipal, structural (co-op); construction engineering (management) (co-op); control engineering (systems) (co-op); electrical engineering (co-op); electronics engineering (co-op); manufacturing engineering (co-op); mechanical engineering (mobile equipment) (co-op).

Additional admission requirements: architectural – Grade 12 mathematics, Grade 11 or 12 physics; civil – Grade 12 mathematics, Grade 11 or 12 physics; construction (management) – Grade 12 mathematics; control engineering (systems)(co-op), electrical (co-op), electronics – Grade 12 advanced mathematics, Grade 11 or 12 physics and four English credits; air conditioning, refrigeration (co-op), manufacturing, mechanical (mobile equipment) – Grade 12 mathematics, Grades 11 or 12 physics and chemistry.

Two-year diplomas (technician)
Air conditioning, refrigeration engineering; architectural; civil (drafting) engineering (co-op); survey (co-op); construction (supervisor); electrical engineering (co-op); electronics engineering; manufacturing engineering (co-op); mechanical (design) engineering (co-op); metallurgical engineering (co-op); motive power (automotive and diesel).

Additional admission requirements: air conditioning, refrigeration engineering, architectural, construction (supervisor), motive power – Grade 12 mathematics; electrical, electronics – Grade 12 English and mathematics; civil (drafting) engineering (co-op), survey (co-op) – Grade 12 mathematics, Grade 11 or 12 physics; manufacturing, mechanical (design) – Grade 12 mathematics; metallurgical – Grade 12 mathematics, Grade 11 or 12 chemistry.

One-year certificates
Construction carpentry techniques, electronics (biomedical) engineering technician/technology, motive power technician (service management), motive power technician (parts merchandising).

Additional admission requirements: electronics (biomedical) engineering – two-year electrical/electronics engineering diploma or mature student status with extensive electronics background, standing in Grade 11 or 12 chemistry; motive power technician (service management) – two-year motive power technician diploma or Ontario Secondary School Graduation Diploma and motive power joureyman status.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult calendar for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Credit, career, special interest and co-operative courses and workshops are offered in London and in 25 other communities served by the college. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Co-operative education
Several Fanshawe programs are operated on the co-operative education (co-op) plan. This plan integrates related on-the-job work experience with classroom theory during alternating periods of work and study. Such a system helps students orient themselves to the world of work while learning. It helps them develop their human relations skills and job-search techniques, and usually results in a well developed career plan before graduation. Further information is available from the Co-operative Education and Community Relations Division at the college.

Training in Business and Industry
This department offers the TIBI service for industry as well as the Canada Manpower Industrial Training Program (CMITP) and the Ontario Career Action Program (OCAP).

Further Information
Further information may be obtained by writing to
Fanshawe College
P.O. Box 4005
London, Ontario N5W 5H1
Telephone (519) 452-4100

or by contacting offices of the college at any of the following Fanshawe College locations
1460 Oxford St. E.
London, Ontario
Telephone (519) 452-4100

Ireland Rd.
P.O. Box 10
Simcoe, Ontario N3Y 4K4
Telephone (519) 438-5142

R.R. #3
Woodstock, Ontario N4S 7V7
Telephone (519) 537-6203

10 Ontario Rd.
St. Thomas, Ontario N5P 3N4
Telephone (519) 633-2030

George Brown College of Applied Arts and Technology

Toronto

President: Douglas E. Light

Enrolment 1982-83

Full-time	9 042
Part-time	36 735

George Brown College of Applied Arts and Technology serves the college level education needs of the City of Toronto. From the outset its primary objective has been to educate people for employment now, and for a secure future.

The college operates five campuses and offers nearly 200 programs to prospective students.

Campus locations:

Casa Loma Campus
160 Kendal Ave.
Toronto, Ontario
M5R 1M3

Nightingale Campus
2 Murray St.
Toronto, Ontario
M5T 1T6

College Street Campus
507 College St.
Toronto, Ontario
M6G 1A8

St. James Campus
200 King St. E.
Toronto, Ontario
M5A 3W8

Kensington Campus
21 Nassau St.
Toronto, Ontario
M5T 1M3

Continuing Education
258 Adelaide St. E.
Toronto, Ontario

Programs Offered

• Arts and Science – General and Applied

Two-year diplomas
Activation co-ordinator, addiction counsellor, child care worker, community worker, dance training, early childhood education, theatre arts.

Additional admission requirements: activation co-ordinator, addiction counsellor, child care worker, community worker, early childhood education – completion of questionnaire and interview; dance training, theatre arts – audition and interview.

One-year certificates
Basic employment training, (basic training for skill development), English as a second language, English for science and high technology, headstart for the hearing impaired, industrial and vocational orientation, job readiness (BJRT), orientation to homemaking, rehabilitation through education, straight truck driver, tractor-trailer driver.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information. Straight truck driver, tractor-trailer driver – 18 years of age with an Ontario Driver's licence. Students must produce an Ontario Driver's Licence Conversion Form available from any Ontario Driver Examination Centre.

Fashion Technology

Three-year diplomas
Apparel management, creative fashion design, jewellery arts, watchmaking.

Additional admission requirements: questionnaire and orientation interview may be required; jewellery arts – portfolio required.

Two-year diplomas
Commercial ceramics, furniture production and design.

Additional admission requirements: questionnaire and orientation interview may be required.

One-year diploma
Jewellery repairs.

One-year certificates
Apparel pattern drafting; dressmaking – custom and alteration; fur, leather and suede; furniture – woodworking and finishing; furniture upholstery – repair; industrial power sewing; industrial power sewing machine mechanic; jewellery – precious metal grinder and polisher.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

Graphics Arts

Three-year diplomas
Graphic arts printing technology, graphic design.

Additional admission requirements: graphic arts printing technology – Grades 11 and 12 English and mathematics, tests in mechanical reasoning and colour vision acuity; graphic design – portfolio and art test.

Two-year diploma
Printing technician.

Additional admission requirements: Grades 11 and 12 English and mathematics, tests in mechanical reasoning and colour vision acuity.

One-year certificates
Commercial art, computer typesetter, offset printing, screen process printing, signwriting.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

• Business

Three-year diploma (six semesters)
Business administration, with options in business administration – accounting, business administration – data processing, business administration – marketing.

Additional admission requirements: Grades 11 and 12 mathematics and English.

Two-year diplomas
Business (options in accounting, data processing, general, physical distribution, marketing), business diploma – insurance, court reporting (machine shorthand), residential construction management, residential property management, retail management, secretarial arts (options in general, executive, legal), secretarial arts (word processing).

Additional admission requirements: business, business diploma – insurance, residential construction management – Grades 11 and 12 mathematics and English; court reporting (machine shorthand), secretarial arts, secretarial arts (word processing) – Grades 11 and 12 English; residential property management – interview.

One-year diplomas and post-graduate diplomas
Court reporting (stenomask), executive receptionist, junior programmer (3 tri-mesters), sales, word processing operator.

Additional admission requirements: court reporting (stenomask) – interview, tests in English and voice; executive receptionist, medical dictatyping, word processing operator – Grades 11 and 12 English; sales – Grades 11 and 12 mathematics and English.

One-year certificates
Accounting assistant, bookkeeper-typist, clerk typist, commercial refresher, data entry operator, dicta-typist, junior programmer, secretary-shorthand, S.T.E.P. (secretarial training and employment program), word processing operator.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

Hospitality

Two-year diplomas
Culinary management, food and beverage management, hotel management.

Additional admission requirements: an orientation interview.

One-year certificates
Baking techniques, bartending, dining room service, fast food supervisor, food preparation general-basic, food preparation general-advanced, hotel front office and reception, retail meat cutting.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

• Health Sciences

Three-year diplomas
Dental technology, chiropody.

Additional admission requirements: Grade 12 chemistry, Grade 11 physics and biology. Manual dexterity test required.

Two and one-half year diploma
Diploma nursing.
There are two intakes per year for this program: one in September and one in January.

Additional admission requirements: two different sciences in Grades 11 and 12.

Two-year diplomas
Clinical methods in orthotics/prosthetics, denture therapy, fitness instructor, orthotic/prosthetic technician.

Additional admission requirements: clinical methods in orthotics/prosthetics – Grade 12 chemistry, Grade 11 physics and biology, interview; denture therapy – Grade 12 chemistry, Grade 11 physics and biology, manual dexterity test; fitness instructor – Grade 12 mathematics and chemistry, Grade 11 biology, orthotic/prosthetics technician – Grade 11 and 12 physics and biology, manual dexterity test.

One-year diploma
Dental assistant.

Additional admission requirements: Grade 12 chemistry, Grade 11 biology, typing at 30 wpm.

One-year certificates
Health care aide, nursery aide.

Additional admission requirements: requirements vary according to the program. Some programs may require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

One-year post-secondary
Pre-health sciences.

One-year post-diploma
Dental hygiene (expanded duties), dental hygiene, registered nurse – critical care, registered nurse – neonatal intensive care, registered nurse – occupational health nursing, registered nurse – operating room, registered nurse – rehabilitation nursing, teachers of nursing – long term care, upgrading program for graduate nurses, mental health program.

Additional admission requirements: dental hygiene (expanded duties) – Ontario certification as a dental hygienist, one year of work experience, manual dexterity test and interview; dental hygienist – Ontario certification as a dental assistant, one year of work experience.

• Technology

Three-year diplomas (two calendar years)
Civil engineering technology, construction engineering technology, electrical engineering technology, electronics engineering technology, energy conversion technology, instrumentation engineering technology, mechanical engineering technology (drafting design), mechanical engineering technology (tool design and machine design), survey technology.

Additional admission requirements: civil, construction, mechanical (drafting design), mechanical (tool design), survey technology – Grades 11 and 12 mathematics (business mathematics not included); electrical, electronics, instrumentation – Grade 11 and 12 English and mathematics (business mathematics not included); energy conversion technology – Grade 11 physics, Grade 12 mathematics and English.

Two-year diplomas
Acoustics engineering technician, air conditioning, refrigeration engineering technician, architectural technician (drafting), civil engineering technician, construction engineering technician (management), drafting technician, electrical engineering technician, electrical engineering technician (design), electronics engineering technician, instrumentation engineering technician (industrial), mechanical engineering technician (building services drafting), mechanical engineering technician (drafting design), mechanical engineering technician (tool design), mechanical engineering technician (toolmaking), piano technician, stationary power plant engineering, survey technician.

Additional admission requirements: acoustics, electrical, electrical (design), electronics, instrumentation (industrial), mechanical (toolmaking), stationary power plant engineering – Grade 11 and 12 English and mathematics (business mathematics not included); air conditioning, refrigeration, civil, construction (management), drafting technician, mechanical (building services drafting), mechanical (drafting design), mechanical (tool design), survey technician – Grades 11 and 12 mathematics (business mathematics not included); piano technician – audition and interview.

One-year diploma
Welding specialist.

Additional admission requirements: Grade 12 English and mathematics, specialization in welding.

One-year certificates
Appliance servicing, bricklayer pre-apprenticeship, building mechanical systems operator, business equipment servicing, carpenter general, drafting, drafting – process piping, electronics – audio equipment and systems, electronics – basic skills, electronics – digital equipment and systems, electronics – industrial control, electronics – office systems servicing, electronics – radio, electronics – video tape recorder, gas fitter, heating technician, hi-fi and TV servicing, industrial electronic controls (journeyman), industrial power sewing machine mechanic, instrumentation mechanic, machine shop, masonry, mechanical engineering drafting, oil burner service, painting and decorating, plastics – moulding and set-up mechanic, post office training, process piping design technician, refrigeration and air conditioning, stationary engineering – 4th class, survey assistant, welding fitter, welding fitter refresher, welding operator, women into trades and technology.

Additional admission requirements: requirements vary according to the program. Many of these programs require less than an Ontario Secondary School Graduation Diploma. Contact the college for information.

• Alternative Learning

Academic upgrading, pre-health science.
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section.

Apprenticeship
Some of these programs are offered on a part-time or day-release basis as well as in the traditional pattern of eight to ten weeks at the college separated by on-the-job training. For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
George Brown College offers several hundred continuing education courses both day and evening throughout the year. Along with general interest courses, credit courses and refresher courses for professionals (those in the skilled trades and high technology areas), are available. The Continuing Education Department also coordinates special courses for various professional associations.

For general information, see Continuing Education in the General Information on Colleges of Applied Arts and Technology section. Contact the Information Services Department at the college for brochures and specific information.

Training in Business and Industry
This department coordinates the Ontario Career Action Program (OCAP), the Canada Manpower Industrial Training Program (CMITP), the TIBI service for business and industry through which specially developed and individualized packages of courses or programs are conducted on the client's premises, and the Ontario Management Development Program (OMDP) courses, several of which are available on a modular basis.

Further information
Additional information is available by contacting
Information Services Department
George Brown College of Applied Arts and Technology
Box 1015, Station B
Toronto, Ontario M5T 2T9
Telephone (416) 967-1212

Georgian College of Applied Arts and Technology

Barrie

President: W.F.J. Busch

Enrolment 1982-83

Full-time	3 831
Part-time	15 630

Georgian College serves the Georgian Bay region. In addition to the three major campuses, the college maintains liaison offices in a number of smaller communities throughout the region.

Campus locations:

Owen Sound Campus
1150 8th St. E.
P.O. Box 700
Owen Sound, Ontario
N4K 5R4

Barrie Campus
One Georgian Dr.
Barrie, Ontario
L4M 3X9

Orillia Campus
825 Memorial Ave.
P.O. Box 2316
Orillia, Ontario
L3V 6S2

Programs Offered

• Design Arts

Three-year diplomas
Design arts (options in creative arts, graphic design, industrial design, interior design, and material arts which offers additional options in ceramics and glass/metals, woods and plastics/textiles and weaving).

Two-year diplomas
Design arts (same options as three-year programs).

• General and Applied Arts

Two-year diplomas
Design arts (same options as three-year programs), early childhood education, journalism, law and security administration, mental retardation counsellor.

Additional admission requirements: journalism – Grade 12 English; mental retardation counsellor – Grade 12 English and Grade 11 or 12 biology required for September 1983.

Two-year diploma and one-year certificate
General arts and science program is divided into two basic core areas: language and humanities, and physical and social sciences.

One-year post-diploma
Recreation for special populations.

Additional admission requirements: Ontario Community College Diploma in a human specialty area, or the equivalent.

• Business

Three-year diploma
Business administration, computer programmer/analyst.

Additional admission requirements: computer programmer/analyst – Grade 12 mathematics and English are strongly recommended. Appli-

cants may be required to complete a standard aptitude test.

Two-year diplomas
Advertising, business (second year options in marketing and accounting), secretarial arts (legal, medical), fashion merchandising, business-information processing.
Additional admission requirements: secretarial arts (legal, medical) – secretarial-general certificate or equivalent.

One-year certificate
Secretarial-general, secretarial-legal, secretarial-medical.

• Health Sciences

Three-year diploma
Nursing.
Additional admission requirements: two senior level sciences, one of which must be biology, senior level English and mathematics.

Two-year diplomas
Dental hygiene, dispensing optician.
Additional admission requirements: dental hygiene – Dental Assistant Certificate; dispensing optician – Grade 12 mathematics, Grade 11 physics.

One-year certificates
Dental assistant, nursing assistant.
Additional admission requirements: dental assistant – senior level English and senior level biology recommended for September, 1982, required for September, 1983.

• Technology

Three-year diplomas (technology)
Civil engineering (co-op), electrical engineering (co-op), electronics engineering, marine (co-op, options in navigation and engineering), mechanical engineering (co-op), resources engineering (co-op).
Additional admission requirements: Grade 12 English and mathematics and a science. Physics is the science required for the marine programs and chemistry is also required for the engineering option.

Two-year diplomas (technician)
Air traffic control, civil engineering (co-op), electrical engineering (co-op), electronics engineering, mechanical (drafting and industrial technician options in the second year) (co-op), survey (co-op).
Additional admission requirements: Grade 12 English and mathematics and a science; air traffic control – applicants must undergo a questionnaire, a personal interview, obtain security clearance, and pass a rigid medical examination.

• School of Tourism

Three-year diplomas
Tourism management (co-op).

Two-year diplomas
Resort and hotel operation (co-op).

• Alternative Learning

Academic upgrading
This training is available at all three campuses. For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult calendar for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Both credit and non-credit courses are offered to adult students in approximately 32 locations throughout the Georgian Bay region. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section. Contact the Continuing Education Division of the college for details.

Co-operative education
Georgian College operates several co-operative programs. These programs have both an academic element and a work/study portion which is taken in industry. The work/study element may extend anywhere from three weeks to eight months depending on the nature of the arrangement with industry.

Additional Costs
Additional costs that must be borne by the student are as follows:
(a) textbooks and equipment, minimum $100 to a maximum of $550 for first year
(b) accommodation and board, $45 per week.

Further Information
Additional information is available from
Wendy Hicks
Registrar

John Bobbette
Manager – Admissions, Liaison and Information Services

W.T. Egan
Financial Aid Administrator

Georgian College of Applied Arts and Technology
One Georgian Dr.
Barrie, Ontario L4M 3X9
Telephone (705) 728-1951

Information concerning the Owen Sound Campus may be obtained from
R.G. Cameron
Admissions Officer
Georgian College of Applied Arts and Technology
1150 8th St. E.
P.O. Box 700
Owen Sound, Ontario N4K 5R4
Telephone (519) 376-0682

Information concerning the Orillia campus may be obtained from
Sue Wood
Manager, Orillia Campus
Georgian College of Applied Arts and Technology
825 Memorial Ave.
P.O. Box 2316
Orillia, Ontario L3V 6S2
Telephone (705) 325-2705

Humber College of Applied Arts and Technology

Toronto

President: Robert A. Gordon

Enrolment 1982-83

Full-time	10 089
Part-time	66 920

Humber's largest campus is the North which offers most of the post-secondary programs. Lakeshore 1 offers a selection of post-secondary programs and a wide range of academic and commercial programs. At present, an intensified and varied summer program is being designed at the Lakeshore 1 Campus in order to take advantage of its convenient location relative to local transportation and the shores of Lake Ontario. Lakeshore 2 offers a limited selection of post-secondary programs and a full range of technical and apprenticeship programs. York-Eglinton Centre/Keelesdale campuses offer academic and commercial programs, English as a second language, as well as many community programs and part-time courses.

Campus locations:
North Campus
205 Humber College Blvd.
Rexdale, Ontario

Humber Lakeshore 2 Campus and Industrial Resource Centre
56 Queen Elizabeth Blvd.
Toronto, Ontario

Humber Lakeshore 1 Campus
3199 Lakeshore Blvd. W.
Toronto, Ontario

York Campuses:
York-Eglinton Centre,
1669 Eglinton Ave. West
Toronto, Ontario

Keelesdale Campus
88 Industry St.
Weston, Ontario

Programs Offered

• Arts and Science – General and Applied

Diplomas
Arena management, chef de partie, child care worker, community studies, early childhood education, early childhood education for the developmentally handicapped, equine studies, family and consumer studies, hotel and restaurant administration, landscape technician/technology, law and security administration, mental retardation counsellor, music, recreation leadership, rehabilitation worker, retail floriculture, ski area operation, social services, travel and tourism.
Additional admission requirements: Most of the above require a medical examination, related experience, a pre-admission interview and in some cases a test.

Certificate
Fashion modelling.
Additional admission requirements: See above.

Creative arts diplomas
Advertising and graphic design, audio-visual technician, creative photography, film and TV production (creative cinematography), furniture

design, interior design, journalism, package design, public relations, radio broadcasting, theatre arts.

Additional admission requirements: Most of the above require related experience, a pre-admission interview, a portfolio or audition and in some cases a test.

Human studies diplomas
General arts and science.

Human studies academic certificates
Academic upgrading and college preparatory, advanced English as a second language, basic job readiness training, English as a second language.

Additional admission requirements: Admission is open to any adult 19 years of age and over on a "first-come, first-served" basis. Students currently in an Ontario Secondary School will be considered only on the recommendation of an official from the high school concerned. Persons out of school a minimum of 12 months are required to undertake an admissions interview as well as placement tests in English and mathematics. Advanced English as a second language requires two to three years practical work experience in English, above and beyond completion of the basic program.

• Business

Diplomas
Accountancy (credits toward CGA/RIA), business administration (profile in management systems), computer programming, computer information systems, data processing, general business (profiles in business management, business systems, manufacturing management, personnel management, legal assistant, office systems administration, a specialized profile), marketing, secretarial (executive, legal, medical), retail co-op, word processing supervisor.

Additional admission requirements: Some of the above require skill prerequisites (e.g. typing and/or shorthand) before entry. Retail co-op requires an interview by both faculty and business representatives. All business programs, except secretarial, require Grade 12 English and mathematics. Secretarial programs require Grade 12 English.

Commercial certificates
Accountancy assistant, bookkeeper-typist, clerk typist, dicta typist, microcomputer business applications, office systems operations, teller cashier.

Additional admission requirements: A pre-admission interview and pretests in communications and mathematics are required at least one week before classes begin. The student should have a working knowledge of whole numbers, fractions, decimals, percentages and a good command of conversational English.

• Health Sciences

Diplomas
Funeral services, nursing (two and one-half years).

Additional admission requirements: pre-admission interview (group or individual) and health certificate (health history and physician's statement of health). Please check college brochures for specific science requirements for programs listed in this area.

Certificates
Ambulance and emergency care, pharmacy assistant, nursing assistant, registered nursing post-diploma programs in coronary care and operating room.

Additional admission requirements: see requirements for health science diplomas.

• Technology

Diplomas
Aerial survey technician, air conditioning and refrigeration engineering, architectural (design) technician/technology, chemical engineering technology, chemical (industrial) engineering technology, chemical (laboratory) technician, chemical (microbiology) technology, civil engineering technician/technology, computer engineering technology, electrical (control) engineering technician, electronics engineering technician/technology, electro-mechanical (precision instrument) engineering technician, electronics (medical equipment) engineering technician, electro-mechanical engineering technician technology, explosives technician, hydrographic survey technology, industrial (management) engineering technology, instrumentation (industrial) engineering technician, manufacturing engineering technician/technology, mechanical (drafting design) engineering technician, mechanical (numerical control) technician, mechanical (solar) engineering technology, mechanical (tool and die) engineering technician, safety engineering technology, survey technician/technology, transportation planning technology, transportation planning technician, yachting studies.

Additional admission requirements: four credits in English, four credits in technical or academic mathematics and a minimum of two credits in any combination of senior level science and program related senior level technical courses.

Technical certificates
Automatic screw machine (setter operator), cabinet making (basic), camera repair mechanic, drafting, drafting refresher, electronics (digital systems), electronics (general servicing), electronics (mobile radio), numeric control machine servicing, electronics (radio, hi-fi and TV servicing), industrial instrumentation mechanic, industrial maintenance (packaging) mechanic, machine shop practice, marine and small powered equipment mechanic, numeric control machine programmer, precision instrument mechanic, welder fitter, welder operator, welder refresher.

Additional admission requirements: A pre-admission interview and pretests in mathematics and conversational English are required at least one week before classes begin. A working knowledge of mathematics, fractions, decimals, mixed operations, measurement and dimensions is recommended. In several programs substitution, equations, formulas, graphing and trigonometry may also be required.

• Alternative Learning

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuous learning
The Centre for Continuous Learning provides part-time studies and activities in more than 1 000 special interest areas. It offers credit and special interest courses and workshops, as well as seminars and conferences in response to a continuing liaison with business, industrial, government and community organizations. In addition, each of the college's divisions endeavours to meet the needs of the community by offering specialized programs for credit purposes as well as courses designed to meet the general interests of the community. These courses are offered at all campus locations and the Neighbourhood Learning Centres.

Further Information
For further information on admission requirements and details about full-time programs and facilities, please contact
Office of the Registrar
Humber College of Applied Arts and Technology
P.O. Box 1900
Rexdale, Ontario M9W 5L7
Telephone (416) 675-3111

For a list of continuing education courses, please contact
Centre for Continuous Learning
Humber College of Applied Arts and Technology
P.O. Box 1900
Rexdale, Ontario M9W 5L7
Telephone (416) 675-3111

For information on and application forms for the Ontario Student Assistance Program, please contact
Financial Aid Office
Humber College of Applied Arts and Technology
P.O. Box 1900
Rexdale, Ontario M9W 5L7
Telephone (416) 675-3111

Lambton College of Applied Arts and Technology

Sarnia

President: George B. Allan

Enrolment 1982-83

Full-time	1 688
Part-time	5 100

Lambton College serves the Sarnia/Lambton County area.

Campus locations:

Modeland Road Campus
1457 London Rd.
P.O. Box 969
Sarnia, Ontario
N7T 7K4

Kettle Point Campus
P.O. Box 748
Forest, Ontario
(upgrading only)

BJRT Campus
2nd Floor
Shoprite Building
781 Exmouth St.
Sarnia, Ontario
(BJRT only)

Industrial Fire School
Lasalle Rd.
Sarnia, Ontario
(fire training for industry)

Programs Offered

• Arts and Science – General and Applied

Two-year diplomas
Early childhood education; general arts and science (with a wide variety of majors); parks operation and services; radio, television and journalism arts.

One-year certificates
Art fundamentals, infant/toddler care and guidance.

Additional admission requirements: infant/toddler care and guidance – successful completion of the first year of, or graduation from, an acceptable early childhood education program. Each 10-week term is offered over two consecutive summers.

Note: Students with an appropriate selection of Grade 13 credits may be admitted directly to the second year of any general arts and science programs.

• Business

Three-year diplomas
Business administration (options in accounting, marketing, combination accounting/marketing, computer programming).

Additional admission requirements: computer programming analyst – Grade 12 mathematics.

Two-year diplomas
Accountancy, marketing, secretarial arts (options in executive, legal, medical).

The accountancy, marketing and business administration programs have a common first term enabling new students to delay selecting their programs until the beginning of the second term. Secretarial arts has a common first year with specialization in the second year. Students can then make an enlightened decision on the choice of their programs.

Students with satisfactory standing in Grade 12 English, typewriting (minimum 40 wpm) or office practice, and Pitman shorthand (minimum 80 wpm) included in the Ontario Secondary School Graduation Diploma, may be admitted directly to the second (specialty) year of the secretarial arts program.

One-year certificate
Secretarial.

• Health Sciences

Two-year diplomas
Nursing (six terms)
Graduates of this program are able to plan and give care to individuals of all ages, and to function as general staff nurses in health care agencies in which leadership is provided by experienced personnel.

Selected clinical experiences provide the opportunity for students to relate theory to nursing practice. Students receive clinical experience in a variety of community agencies, general hospitals, public health agencies, doctors' offices, senior citizens' and extended care facilities.

Successful completion of this program qualifies graduates to write the registration examinations of the College of Nurses of Ontario.

Additional admission requirements: two science credits beyond Grade 10 or equivalent, biology (Grade 11 or higher) and chemistry (Grade 12 or higher) strongly recommended. Interviews will be held. Mature students may also be considered for admission.

Medical laboratory technology.
The first year of medical laboratory technology is academic and the second is a year of clinical experience in one of the affiliated hospitals.

Additional admission requirements: graduation from the preparatory program or Ontario Secondary School Honour Graduation Diploma with satisfactory standing in Grade 13 biology, chemistry, English and mathematics (preferably functions and relations), physics recommended. Final acceptance is subject to an interview normally given during the spring at one of the affiliated hospitals.

One-year certificate
Medical laboratory technology preparatory program.
Graduates of this one-year preparatory program will have fulfilled the academic requirements of the Canadian Society of Laboratory Technologists for eligibility to enter a complete training program in medical laboratory technology at Lambton College or in any other approved program in Canada.

Additional admission requirements: satisfactory standing in Grade 11 physics and Grade 12 chemistry, English and mathematics, or the equivalent, Grade 11 or Grade 12 biology.

• Technology

Three-year diploma
Engineering technology (chemical, electronics, industrial hygiene, mechanical, instrumentation and control).

Additional admission requirements: satisfactory standing in Grade 11 physics and Grade 12 chemistry, English and mathematics, or the equivalent.

Two-year diploma
Engineering technician (chemical, mechanical drafting).

Additional admission requirements: engineering technician (chemical) – satisfactory standing in Grade 11 physics and Grade 12 English, chemistry and mathematics, or the equivalent; engineering technician (mechanical drafting) – satisfactory standing in Grade 11 physics, Grade 12 English and mathematics, and three drafting credits, or the equivalent.

One-year certificates
Process operations program.
This program is specifically designed to prepare secondary school graduates for employment in the process industries. Planned in very close co-operation with the process industries in Sarnia's "Chemical Valley," this program provides the student with an understanding of the process equipment employed and of the principles of operation involved.

Additional admission requirements: satisfactory standing in Grade 11 physics and Grade 12 chemistry, English and mathematics, or the equivalent.

Piping drafting.
Planned in close co-operation with consulting engineering, fabrication, construction and processing companies in Sarnia's "Chemical Valley," this program is designed to fill the local and nationwide need for draftsmen. People possessing skills developed in this program will have a definite advantage for employment in these companies. The entire program consists of drafting courses in the drafting room and does not involve other academic courses. Thus students will work under conditions closely duplicating those they will meet after graduation.

Additional admission requirements: satisfactory standing in Grade 11 physics, Grade 12 English and mathematics, and three drafting credits, or the equivalent.

Note: Students with satisfactory standing in Grade 13 chemistry, English, mathematics (2) and physics may be admitted to the 2nd year of some technolgy programs, but will be required to take any 1st year courses in which they are deficient.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult college calendar for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Lambton College offers over 350 credit and non-credit courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college continuing education brochure for details.

Occupational training
A wide variety of programs is offered including academic upgrading to the equivalent level of Grade 12, clerical and stenographic courses, English as a second language, specialized skill courses, welder fitter, appliance servicing, marine and small engine mechanics, instrumentation mechanics and the training in business and industry programs. One-year programs in electronics, home entertainment service and process operations are also offered in co-operation with the Technology Division.

An industrial day-release program is offered in co-operation with local industry and the Apprenticeship Branch of the Ministry of Colleges and Universities.

Additional Costs
The estimated cost of books, supplies and instruments for the academic year for post-secondary students ranges from $100 to $500. There is also a $42 student activity fee, a $5 registration fee and a $12 graduation fee. Co-op students in technology and parks operation and services also pay a $50 fee for the co-op term.

Further Information
For further information regarding Lambton College, please contact
Community Liaison Officer
Lambton College of Applied Arts and Technology
1457 London Rd.
P.O. Box 969
Sarnia, Ontario N7T 7K4
Telephone (519) 542-7751

Loyalist College of Applied Arts and Technology

Belleville, Ontario

President: Herbert Young

Enrolment 1982-83

Full-time	2 500
Part-time	5 000

Loyalist College serves the Quinte region of Ontario comprising the counties of Hastings, Lennox and Addington, Prince Edward and Northumberland, except the town of Cobourg and the western townships of Northumberland.

Programs

• Arts and Science – General and Applied

Two-year diplomas
Advertising, early childhood education, law and security administration, mental retardation counsellor, print journalism, radio broadcasting, social service worker, television broadcasting, broadcast journalism.

Additional admission requirements: advertising, print journalism, early childhood education, law and security administration – all applicants will be required to complete a questionnaire. Also, applicants for radio broadcasting and broadcast journalism will be required to submit a voice tape. Although interviews are not part of the selection process, applicants are urged to attend career counselling sessions.

• Business

Three and two-year diplomas
Accounting, business administration, data processing, hotel and restaurant management.

Two-year diplomas
Assessment, appraisal and real estate management, secretarial arts (options in medical, legal, executive).

One-year certificate
Secretarial science, junior programmer.

• Health Sciences

Two and one-half year diploma
Nursing.

Additional admission requirements: an Ontario Secondary School Graduation Diploma including credits in Grade 11 or 12 chemistry (general or advanced) and Grade 11 biology or physics (general or advanced), Grade 11 or 12 mathematics (general or advanced), Grade 11 and 12 English (general or advanced). Mature students (19 years of age and over) who do not meet the academic criteria, or do not have the equivalent, will be counselled on an individual basis and will be assessed for academic competency. All applicants will be required to complete a questionnaire. (Since this program is usually over-subscribed, applicants are urged to apply before February 15).

One-year certificate
Nursing assistant.

Additional admission requirements: Mature students (19 years of age and over) who do not meet the academic criteria, or do not have the equivalent will be counselled on an individual basis and will be assessed for academic competency. All applicants will be required to complete a questionnaire.

Certificate of achievement
Health care aide.
This is a 16-week course to prepare persons to function creatively for residents in nursing homes, homes for the aged and similar facilities.

Special admission requirement: Grade 10 minimum.

• Technology

Three-year diplomas (engineering technology)
Chemical, civil, electrical, electronic, electronic engineering technologist – videotex, mechanical (manufacturing) engineering technology.

Additional admission requirements: Grade 12 general or advanced level mathematics and English, Grade 11 physics strongly recommended and typing an asset. Applicants must have Grade 12 chemistry (general or advanced) if they are applying to the chemical engineering technology program. Although no specific standing is required, applicants should have demonstrated academic achievement which would indicate the probability of successful completion of the program.

Direct access to the second year of the three-year programs may be granted for relevant credits from Grade 13, other community colleges, universities or educational institutions, at the discretion of the School Director. Refer to Loyalist's current calendar for specifics. Official transcripts must be provided.

Two-year diplomas (engineering technician)
Architectural drafting, chemical engineering, civil engineering, construction engineering, electrical engineering (50 week non-semestered), electronic engineering (50 week non-semestered), mechanical engineering (50 week non-semestered), survey technician, water resources field technician and marketing – videotex.

Additional admission requirements: Grade 12 mathematics (general or advanced) is required for all programs; architectural drafting, civil, construction, survey technician – Grade 11 physics (general or advanced), drafting is recommended; electrical, electronic – Grade 11 physics (general or advanced) and Grade 12 English (general or advanced) are recommended; marketing – videotex program – Grade 12 English (general or advanced) is required; chemical, water resources field technician – Grade 12 chemistry (general or advanced) is required and Grade 11 physics (general or advanced) is recommended; mechanical – machine shop experience and drafting credit are recommended.

One-year certificates (skill programs)
Electronics, radio/hi-fi/TV servicing (48 weeks); welder-fitter (40 weeks); industrial laboratory assistant (40 weeks); industrial maintenance mechanic (48 weeks); machine shop (40 weeks); quality control analyst (40 weeks). Other skill training courses may be offered as demand and facilities permit. Consult college calendar or phone for more information.

Special admission requirements: electronics, radio/hi-fi/TV servicing – Ontario Grade 10 (Ontario Secondary School Graduation Diploma preferred); industrial laboratory assistant – Ontario Secondary School Graduation Diploma with mathematics and chemistry background; industrial maintenance mechanic, machine shop – Ontario Grade 10 (Ontario Secondary School Grad-

uation Diploma preferred); quality control analyst – Ontario Secondary School Graduation Diploma including credits in chemistry, mathematics, physics and English; welder-fitter – Ontario Grade 10 or equivalent.

20 Week Program
Videotex page creator.
Additional admission requirements: Applicants must possess an Ontario Secondary School Graduation Diploma, including Grade 12 English (general or advanced) and Grade 12 mathematics (general or advanced), typing at 35 wpm recommended.

• Alternative Learning

Academic upgrading
See the "Short Program" listing in the CAAT chart at the beginning of this section. The college also offers a testing program to help determine academic standing prior to beginning an upgrading program. Consult college calendar for details.

Apprenticeship
Loyalist College offers classroom instruction for the apprenticeship programs offered by the Apprenticeship Branch of the Ministry of Colleges and Universities. For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Loyalist College offers many courses leading to certificates and diplomas, including a wide range of co-operative courses. Interest and hobby courses are also offered at the Belleville Campus and at many high schools throughout the four counties served by Loyalist College. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Further Information
For further information
Registrar
Loyalist College of Applied Arts and Technology
Wallbridge-Loyalist Rd.
P.O. Box 4200
Belleville, Ontario K8N 5B9
Telephone (613) 962-9501

Mohawk College of Applied Arts and Technology

Hamilton

President: Keith L. McIntyre

Enrolment 1982-83

Full-time	12 305
Part-time	42 900

Mohawk College serves much of the industrial heartland of southwestern Ontario including Hamilton, Brantford and the surrounding communities.

Campus locations:
Mohawk College's Fennell Campus is located on Hamilton's mountain. The college operates a Health Sciences Education Centre at the Chedoke Campus in Hamilton and a nursing campus in Brantford. The Braneida Campus in Brantford and the Saltfleet Campus in Stoney Creek offer primarily adult training programs. A number of post-secondary programs have been introduced or are in the planning stage at the Braneida Campus. The Wentworth Campus and the English-Language Centre are both located in downtown Hamilton. In the Haldimand-Norfolk region, Mohawk College, in co-operation with McMaster University, operates the Mohawk College-McMaster University Education Information Centre. Also in conjunction with McMaster, the college operates an Education Information Centre located in the Hamilton Public Library.

Programs offered

• Arts and Science – General and Applied

Three-year diplomas
Advertising, applied music, television broadcasting.
Additional admission requirements: Grade 12 English, interview/audition and orientation.

Two-year diplomas
Broadcast journalism, child care worker, early childhood education, law and security administration, municipal planning and development, radio broadcasting, recreation leadership, social services worker.
Additional admission requirements: Grade 12 English, program questionnaire, interview and orientation.

• Business

Three-year diploma
Business administration (optional third year specialization in accounting and marketing).
Additional admission requirements: Grade 11 and 12 algebra-based advanced level mathematics, Grade 11 and Grade 12 advanced level English plus a minimum of nine additional senior level credits.

Two-year diplomas
Accounting, general business, insurance (co-op), marketing (co-op), secretarial (general, legal, medical).
Additional admission requirements: accounting, general business, insurance (co-op), marketing (co-op) – Grade 12 English, Grade 12 mathematics, ten additional senior level credits; secretarial (general, legal, medical) – Grade 12 English.

• Health Sciences

Three-year diplomas
Medical laboratory technology.
This three-year program leads to a diploma qualifying students to write the General Certificate Examination of the Canadian Society of Laboratory Technologists.
Additional admission requirements: good standing in Grade 11 and 12 advanced level English and mathematics, two advanced level sciences (chemistry and one of biology or physics) in Grade 11 or 12, plus two additional Grade 11 or 12 advanced level courses, interview and tests. Hospital laboratory visitation (as per Mohawk College listing) is also required prior to interview.

Occupational therapy.
This diploma program is designed to educate fully qualified occupational therapists at the basic level.
Additional admission requirements: good standing in Grade 11 and 12 advanced level English, two Grade 11 or 12 advanced level senior sciences (physics, chemistry or biology), one other Grade 11 or 12 advanced level credit, interview and tests. Applicants will be considered on an individual basis.

Physiotherapy.
During second and third years, students are based in the Physiotherapy School at the Chedoke Hospital and instruction is given by members of the Faculty of Medicine (McMaster University), Mohawk College faculty and other medical resource people.
Additional admission requirements: good standing in Grade 12 advanced level English, Grade 11 and 12 advanced level mathematics, and two Grade 11 or 12 advanced level sciences (physics, chemistry or biology) interview and tests.

Two- and three-year programs
Radiography.
The two-year program prepares the majority of students for radiographic work in hospital departments, whereas the three-year program may lead to eventual promotion to senior professional responsibilities.
The academic year consists of eleven months with one month's holiday. Both programs have a common first year which constitutes the first year of professional training and may potentially be used as credit toward university studies.
Upon graduation from the program, students will be required to write the CAMRT (Canadian Association of Medical Radiation Technologists) examination in order to become eligible for certification.
Additional admission requirements: good standing in two advanced level mathematics, two advanced level languages (English or French), one advanced level physics, chemistry or biology, all in Grade 11 or 12, plus two other general or advanced level science credits, interview (visit to a radiography department required prior to interview) and tests.

Two and one-half to three-year diploma
Nursing.
This program leads to a Diploma of Nursing and, upon successful completion of the examinations set by the College of Nurses of Ontario, certification as a registered nurse.
Additional admission requirements: good standing in Grade 11 and 12 advanced level English, two Grades 11 and/or 12 advanced level

sciences (biology preferred), two other Grades 11 and/or 12 credits at the advanced level, interview and tests. Applicants with any of these credits at the general level will be considered on an individual basis.

One-year post diploma
Diagnostic ultrasound.
Additional admission requirements: all applicants must be a graduate of a minimum two-year paramedical program, i.e. radiography, medical laboratory or nursing.

• Technology

Three-year diplomas (technology)
Architectural (co-op), chemical engineering, civil engineering (co-op), computer electronics engineering (co-op), computer systems (co-op), electrical control engineering (co-op), energy systems engineering (co-op experimental), electronics engineering (co-op), industrial management (co-op), mechanical engineering (production and design options, co-op), metallurgy and material engineering, textile engineering, transportation planning (co-op).
Additional admission requirements: Applicants who have successfully completed advanced level English, Grades 11 and 12 advanced level mathematics, and Grades 11 and 12 advanced level physics and chemistry are generally well prepared for the three-year technology programs. Applicants with these subjects taken at the general level will be considered on an individual basis. Under certain conditions, a technical subject taken at an acceptable level may be substituted for either chemistry or physics. A program questionnaire may be used as a means of selection where a program becomes oversubscribed.
Applicants for the architectural technology program must attend an orientation/test session.
Applicants for the computer systems technology program and the transportation planning technology program must have Grade 12 advanced level English and Grades 11 and 12 advanced level mathematics.
Technology applicants who have taken mathematics at the Grades 11 and 12 general level will, if accepted, be required to take a summer preparatory mathematics course. Exemption from the preparatory mathematics course may be obtained by writing a mathematics test which will determine the student's mathematical functioning level.

Two-year diplomas (technician)
Architectural, chemical, civil engineering, construction engineering, data processing (co-operative/experiential learning), electrical systems engineering, electronics engineering, industrial engineering, instrumentation, mechanical drafting, materials testing (co-op).
Additional admission requirements: Grade 12 mathematics and English, physics, chemistry or a technical subject taken at the Grade 11 level or higher. Architectural technician applicants must attend an orientation/test session.

Fitter welder, industrial electrician, industrial machinist, industrial mechanic, tool and die craftsman.
These are three-year co-op/experiential learning programs.
Additional admission requirements: Grade 12 English and mathematics, machine shop specialization recommended, aptitude test and questionnaire.

One-year certificates
Parts management and merchandising, stationary engineer (class 4, class 3 and 2).
Additional admission requirements: parts management and merchandising – Grade 12 English, physics, chemistry or a technical subject taken at the Grade 11 level or higher, Grade 11 mathematics; stationary engineer – Grade 12 English and mathematics, plus Grade 11 or 12 chemistry and physics.

• Alternative Learning

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Co-operative education
In 1982 eighteen post-secondary programs were co-op. Students alternate a total of two or three four-month terms of paid work experience with their regular academic semesters.
The Department of Co-operative Education serves as the liaison between students, employers and the students' academic department. Students within the co-op education program are required to successfully complete a specified number of work terms, receive a satisfactory evaluation from their employer, complete an acceptable work term report, and adhere to all the rules governing Mohawk's co-op education program.
The availability of the co-op system of study is indicated after each program listing.

Experiential learning
Programs are being developed in the experiential learning mode. The college is pursuing the concept of granting credit for competencies acquired in the work field. Several programs have integrated experiential learning components into their curricula. These include: fitter welder, industrial electrician, industrial machinist, industrial mechanic, tool and die craftsman, energy systems engineering technology and data processing.

Short Programs
In addition to regular post-seconday programs, the college offers a great variety of short programs. These include: commerical art, drafting, dressmaking, travel counsellor, food and beverage management and many others.

Further information
For further information on admission requirements and details about programs and facilities, please contact
Registrar or Liaison Department
Mohawk College of Applied Arts and Technology
Fennell Ave. and West 5th
P.O. Box 2034
Hamilton, Ontario L8N 3T2

For information on and application forms for student awards and loans, please contact
Financial Aid Administrator
Division of the Registrar
Mohawk College of Applied Arts and Technology
Fennell Ave. and West 5th
P.O. Box 2034
Hamilton, Ontario L8N 3T2
Telephone (416) 389-4461

Niagara College of Applied Arts and Technology

Welland

President: Ms. J. Robarts

Enrolment 1982-83

Full-time	4 051
Part-time	18 280

Niagara College serves the Niagara region and offers a broad range of programs housed in modern educational facilities.
In 1979 the college was designated to be the official bilingual college in Southern Ontario. As a result, several programs including bilingual secretary, early childhood education and tourism are also offered as bilingual programs.

Campus locations:
All post-secondary courses are offered at the main campus in Welland with the exception of:
Horticultural technician, offered at
Horticultural Centre
Ivan D. Buchanan Hall
360 Niagara St.
St. Catharines, Ontario L2M 4W1

Theatre arts, offered at
Niagara College Theatre Centre
54 Empire St.
Welland, Ontario L3B 2L4

Hotel and restaurant administration, offered at
Rainbow Hotel Centre
5755 River Rd.
Niagara Falls, Ontario L2G 3K9

Nursing education, offered at
Mack Nursing Education Centre
St. Catharines, Ontario L2R 7C6

Programs offered

• Arts and Science – General and Applied

Three-year diploma
Broadcasting, radio and television.
Additional admission requirement: interview.

Two-year diplomas
Early childhood education/*éducation des petits* (bilingual), educational resources technician, fashion arts, general college, horticultural technician, human relations, interior design, journalism print, law and security administration, library technician, social services worker, theatre arts.
Additional admission requirements: early childhood education, social services worker, theatre arts – interview.

Two-year diplomas (third year optional)
Interior design, theatre arts.

• Business

Three-year diplomas
Business administration – also offered as January start – (second- and third-year specialization in data processing, financial, industrial (also offered as co-op), marketing, personnel management and industrial relations), hotel and restaurant administration.
Additional admission requirements: business

administration – Grade 12 English and mathematics.

Two-year diplomas
Bilingual secretary (co-op), business: accounting, business: data processing, business: sales and merchandising (all three business programs also offered starting in January), legal assistant (co-op), retail management (co-op), secretarial arts (co-op), tourism (tours and attractions) (co-op), *tourisme* (bilingual) (co-op).

One-year certificates
Secretarial studies.
Additional admission requirements: advanced typing or shorthand skills.

• Health Sciences

Three-year diploma
Nursing.
Additional admission requirements: two general level science credits (Grade 12 chemistry and either Grade 11 or 12 biology or physics preferable), compulsory selection interview, written autobiographical sketch, satisfactory health exam. It is recommended that the applicant have attained 60% at the advanced level or 70% at the general level in sciences.

Two-year diplomas
Dental hygiene (one year following a one-year certificate program), health records technician.
Additional admission requirements: dental hygiene – certification as a dental assistant, Grade 12 English, Grade 11 or 12 biology, Grade 12 chemistry, ability to demonstrate skill in radiographic techniques, interview, one year of related experience, satisfactory health exam, questionnaire, test; health records technician – interview.

One-year certificates
Ambulance and emergency care, dental assistant, dicta-typist – health records, health sciences preparatory.
Additional admission requirements: ambulance and emergency care – two senior level sciences, preferably chemistry and biology. Prior to admission the applicant must submit an information sheet, and possess a Class "F" Driver's License (Ontario), a standard First Aid Certificate and a certificate as a Basic Rescuer in Cardiopulmonary Resuscitation (CPR) issued by the Canadian Heart Foundation, attend an orientation session and personal interview; dental assistant – interview, Grade 12 English, Grade 11 or 12 biology, Grade 12 chemistry with 60% at the advanced level or 70% at the general level in the two sciences. Before a personal interview will be granted, applicants must have completed a pre-information sheet sent by the Admissions Office and have proof of having visited a dental office to learn more about this career; health records dicta-typist – 40 wpm typing and interview.

• Technology

Three-year diplomas (technology)
Chemical engineering, computer engineering, construction engineering, electrical engineering (power systems), electronics engineering, mechanical engineering.
Additional admission requirements: construction engineering – Grade 12 mathematics and English; engineering – Grade 11 physics and Grade 12 mathematics, chemistry and English.

Two-year diplomas (technician)
Chemical engineering, electrical engineering, electronics engineering, manufacturing engineering, mechanical engineering technician (drafting design), air conditioning refrigeration engineering, survey.
Additional admission requirements: Grade 12 mathematics; mechanical engineering technician (drafting design) – one drafting credit; survey – introductory applied physics.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. For further details, consult college calendar.

Adult training
Programs offered in retraining are designed to meet the changing demands of business and industry, and provide a learning situation whereby persons may be prepared for upward job mobility or entrance to other levels of learning. Contact the college for information on programs offered.
Admission requirements: Applicants must be 17 years of age and out of school for one year or have an Ontario Secondary School Graduation Diploma.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
The college offers a wide variety of both credit and non-credit courses in Welland, St. Catharines, Niagara Falls and at smaller centres throughout the Niagara Region. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Additional Costs
In certain programs, students are required to pay an additional materials fee. Please consult the college calendar for further information.

Further Information
Please address inquiries about admission requirements and specific programs to
Admissions Officer
Niagara College of Applied Arts and Technology
Woodlawn Rd. P.O. Box 1005
Welland, Ontario L3B 5S2
Telephone: (416) 735-2211

Northern College of Applied Arts and Technology

Haileybury, Kapuskasing, Kirkland Lake, Moosonee, South Porcupine (Timmins)

President: J.H. Drysdale

Enrolment 1982-83

Full-time	1 974
Part-time	4 710

Northern College serves the districts of Cochrane and Temiskaming in Northeastern Ontario up to the Hudson and James Bay coasts. The college has four campuses, each near a major centre in the territory: Haileybury School of Mines, Kapuskasing Campus, Kirkland Lake Campus and Porcupine (Timmins) Campus.

Campus locations:
The Haileybury School of Mines is located in the town of Haileybury, overlooking Lake Temiskaming, slightly more than 480 kilometers north of Toronto.

The James Bay Education Centre in Moosonee became Northern College's fifth campus on March 1, 1982

The Kapuskasing Campus is located in the city of Kapuskasing at the following address: 3 Aurora Ave., Kapuskasing, Ontario.

The Kirkland Lake Campus is located about 48 kilometers west of the Quebec border.

The Porcupine Campus is located on Lake Porcupine in a suburb of Timmins.

Campus Program Specializations

Haileybury School of Mines

At Haileybury students may choose from a broad range of mining specializations: mining technology (a broad curriculum integrating geology, mining and metallurgy), industrial instrumentation (process measurement and control), mine maintenance technology.

James Bay Education Centre

The James Bay Education Centre was originally designed as an experiment in frontier schooling and is now emerging as a native education centre for the peoples of the James and Hudson Bays. It contains a gym, library, workshops, classrooms, day care centre and cafeteria.

Kapuskasing Campus

The Kapuskasing Campus offers primarily adult training and continuing education programs: bilingual secretarial arts, business administration (French and English), secretarial arts (French and English), and the first year of data processing (French and English) with a transfer to Kirkland Lake Campus.

Kirkland Lake Campus

The campus' emphasis is on technological programs: civil technician and technology, computer science technology, data processing, electronics technician and technology, electrical technology, general and woods products business administration (French and English), mechanical technician and technology, nursing, secretarial science/word processing (French and English), welding engineering technology.

Porcupine Campus

The Porcupine Campus has the most varied program offerings of the Northern Campuses with programs in applied arts, technology, business and nursing. Program specializations include the following: architectural technician and technology, bilingual secretarial arts, business administration (French and English), child care (French and English), early childhood education (French and English), electrical technician, electronics technician, fine arts and crafts, hospitality administration and food services (French and English), mental retardation counsellor, native alcoholism and drug abuse counsellor, native community health care worker, native legal worker, native recreation worker, native social services worker, nursing, registered nursing assistant, secretarial arts (French and English), social service (French and English), surveying technician and technology. Facilities to accommodate these programs include: studios for sculpting, pottery, drawing and painting; a well equipped weaving room; a photographic studio and lab; and facilities for training in hospitality and food administration. The Porcupine Campus is also the administrative centre for the college's Retraining Division.

Programs Offered

• Arts and Sciences – General and Applied

Two-year diplomas
Child care (French and English), early childhood education (French and English), fine arts and crafts, mental retardation counsellor, native alcoholism and drug abuse worker, native community health care worker, native legal worker, native recreation worker, native social service worker, social service worker (French and English).

• Business

Three-year diplomas
Business administration (accounting, general marketing, wood products; options in French and English), data processing, secretarial science (general, medical, legal; options in English and bilingual).

Two-year diplomas
Accountancy and marketing, business program in accounting, business program in hospitality administration and food services (French and English), secretarial arts (general, medical, legal).

One-year certificates
Clerk-typist, dicta-typist, secretarial arts.

• Health Sciences

Diploma nursing.
Diploma nursing is a two and one-half year program at the Kirkland Lake Campus and a three-year program at the Porcupine Campus.

One-year certificate
Nursing assistant.
Special admission requirements: proof of successful completion of Grade 10 of the four- or five-year secondary school program or equivalent, plus 17 years of age.

• Technology

Three-year diplomas
Architectural, broad curriculum mining, civil, computer science, electrical, electronics, mechanical, mine maintenance, survey, welding.

Two-year diplomas
Architectural, broad curriculum mining, civil, electrical, electronics, industrial instrumentation, mechanical, mine maintenance, survey.

• Alternative Learning

Academic upgrading
Northern offers upgrading programs in both English and French. For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Contact college for details.

Adult training
The college offers modularized business and commerce skill programs which may lead to certification as well as commercial refresher and technical skill programs. Contact college for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
Credit and non-credit courses are offered at all four campuses and in eight satellite centres in northeastern Ontario. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Management Development
More than 60 courses tailored specifically to meet the professional development needs of management are available through the Department of Continuing Education. Several of these courses are also available in French. The department provides a consulting and referral service to help identify business and industry needs for training programs at the supervisory level. A brochure on the Management Development Program is available.

Modular Training
This is a co-operative effort between the college and the Apprenticeship Branch of the Ministry of Colleges and Universities. The program centres around the modular training package for stationary engineers, first to fourth class.

Training in Business and Industry
The purpose of this program is to work with employees who wish to be upgraded and, in some instances, retrained on the job to increase their employability and flexibility. Arrangements for registration may be made by management, staff organization, unions or other groups of employees interested in this type of training. Detailed information is available from the Department of Continuing Education.

Further Information

Director of Student Services
Porcupine Campus, Northern College
P.O. Box 2002
South Porcupine, Ontario P0N 1H0
Telephone (705) 235-3211

Student Affairs Officer
Haileybury School of Mines, Northern College
640 Latchford
Haileybury, Ontario P0J 1K0
Telephone (705) 672-3376

Principal, Kapuskasing Campus
Northern College
3 Aurora Ave.
Kapuskasing, Ontario P5N 2Y3
Telephone (705) 335-8504

Principal, James Bay Education Centre
Northern College
P.O. Box 30, First St.
Moosonee, Ontario P0L 1Y0
Telephone (705) 336-2913

Registrar and Director of Student Services
Kirkland Lake Campus, Northern College
140 Government Rd. E.
Kirkland Lake, Ontario P2N 3L8
Telephone (705) 567-9291

Department of Continuing Education
Northern College
P.O. Box 2002
South Porcupine, Ontario P0N 1H0
Telephone (705) 235-3211

Retraining and Apprenticeship Counsellor
Northern College
P.O. Box 2002
South Porcupine, Ontario P0N 1H0
Telephone (705) 235-3211

St. Clair College of Applied Arts and Technology

Windsor, Chatham

President: R. Bruce McAusland

Enrolment 1982-83

Full-time	5 313
Part-time	37 570

Serving Canada's two southernmost counties, Essex and Kent, St. Clair College has centres located in Windsor and Chatham, Ontario. Among the centres in Windsor are the main or South Campus housing post-secondary, adult training, English as a second language, apprenticeship and continuing education programs for both Windsor and Essex County, and the Ontario Career Action Centre providing career information and counselling to those seeking jobs. Thames Campus in Chatham features the mental retardation counsellor program not available in Windsor. Also offered in Chatham are various post-secondary programs, continuing education courses and adult training programs.

Campus locations:

South Campus
2000 Talbot Rd. W.
Windsor, Ontario
N9A 6S4

Thames Campus
1001 Grand Ave. W.
Chatham, Ontario
N7M 5W4

Ontario Career Action Centre
1291 Ouellette Ave.
Windsor, Ontario
N8X 1J3

Programs Offered

• Arts and Science – General and Applied

Six-semester programs
Advertising (business), journalism (print).
Additional admission requirements: advertising, journalism, – four credits in English (two of which are at the senior level), "C" (60%) advanced level, "B" (70%) general level.

Four-semester programs
Commercial art, craft and design (Thames Campus only – part-time studies only), early childhood education, interior design, law and security administration, legal office administration, tourism (travel counsellor).
Additional admission requirements: commercial art – one credit in art or equivalent and/or portfolio may be required; early childhood education – autobiography and interview; interior design – credits in art and drafting are recommended; legal office administration – four credits in English, "C" (60%) advanced level, "B" (70%) general level; tourism (travel counsellor) – four credits in English (two of which are at the senior level) "C" (60%) advanced level, "B" (70%) general level.

• Business

Six-semester program
Business administration (accounting, data processing, marketing).
Additional admission requirements: four credits in English, two credits in mathematics. Four credits in mathematics may be required in the future.

Four-semester programs
Business (accounting, data processing, marketing), secretarial (executive, legal, medical).
Additional admission requirements: business – four credits in English, two credits in mathematics – four credits in mathematics may be required in the future; secretarial arts – four credits in English, 45 wpm typing, 80 wpm Pitman shorthand/shorterhand or completion of two-semester general secretarial program.

Two-semester program
General secretarial.
Additional admission requirements: four credits in English.

• Health Sciences

Nine-semester program (three years)
Medical laboratory technology.
Additional admission requirements: four credits in mathematics, one senior credit in physics and chemistry, "C" (60%) advanced level, "B" (70%) general level. A written report following a day of observation in a medical laboratory is required.

Six-semester programs
Nursing, mental retardation counsellor (Thames Campus only).
Additional admission requirements: nursing – four credits in English, two of senior biology, chemistry and/or physics, two credits in mathematics, "C" (60%) advanced level, "B" (70%) general level, a certificate of good health and autobiography may be required; mental retardation counsellor – a current standard (basic) First Aid Certificate is recommended.

Four-semester program
Animal health technician, dental hygiene.
Additional admission requirements: four credits in English, three credits in mathematics and one credit each in senior level biology and chemistry, "C" (60%) advanced level, "B" (70%) general level, questionnaire; dental hygiene – Certified Dental Assistant or eligible for certification, work one year experience as a dental assistant is required.

Three-semester programs
Nursing assistant.
Additional admission requirements: nursing assistant – two science credits, two English credits, one mathematics, certificate of good health and autobiography may be required.

Two-semester programs
Dental assistant, pharmacy assistant.
Additional admission requirements: dental assistant – four credits in English, one credit in senior level biology, personal profile and a written report following a day of observation in a dental office may be required (typing ability is recommended); pharmacy assistant – four credits in mathematics, one credit in chemistry, one credit in senior biology, applicants may be required to spend a half day in a pharmacy and submit a written report on their experience.

Part-time studies
Ambulance and emergency care consists of eight modules in two years (September to June) with classes held all day Saturday and Sunday evenings.
Additional admission requirements: attend information session with Program Chairperson, health record, immunization record, First Aid Certificate, and Ontario driver's license.

• Technology

Six-semester programs (technology)
Architectural, chemical engineering, civil engineering, electrical/electronics engineering, industrial engineering technology, mechanical engineering technology.
Additional admission requirements: four credits in mathematics, four credits in English, one senior credit in each of physics and chemistry recommended. Students without the above may be assigned additional course work that could extend beyond the normal academic year. Direct entry to second year of the chemical and food engineering programs may be granted to students with an Ontario Secondary School Honour Graduation Diploma with a 60% average in Grade 13 physics, chemistry, calculus, functions and relations, and any language. Applicants to electrical/electronics with an Ontario Secondary School Honour Graduation Diploma including physics, chemistry, calculus, functions and relations and any language may be given sufficient credits to begin the program in January rather than September, pending space availability.

Four-semester programs (technician)
Electronics, electro-mechanical engineering, manufacturing engineering (design).
Additional admission requirements: four credits in English, four credits in mathematics and one senior credit in each of physics and chemistry recommended. Students without the above may be assigned additional course work that could extend beyond the normal academic year.

Two-year programs (technician)
Food (service management), furniture renovation, landscape, motive power, plastics, toolmaking.
Additional admission requirements: furniture renovation – credits in art, chemistry or shop recommended; motive power – four credits in mathematics required, credits in physics, chemistry and automotive are recommended; plastics – four credits in mathematics required and blueprint, drafting and machine shop are strongly recommended; toolmaking – four credits in mathematics, credits in blueprint, drafting and machine shop are strongly recommended.

One-year program
Machine shop.
Additional admission requirements: four credits in mathematics, credits in blueprint, drafting and machine shop are strongly recommended.

• Alternative Learning

Academic upgrading
Courses in academic upgrading are offered at the Windsor and Chatham campuses. For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section.

Adult training
St. Clair offers skill courses for adults in Windsor and in Chatham. Contact the college for further information.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
The college offers over 1 200 courses on a variety of subjects at both the Windsor and Chatham campuses as well as in smaller centres throughout Essex and Kent counties. Courses are offered four times per year, including during the summer. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact college for details.

Further Information
For additional information please contact
Admissions Office
St. Clair College of Applied Arts and Technology
2000 Talbot Rd. W.
Windsor, Ontario N9A 6S4
Telephone (519) 966-1656 ext. 263
or
Thames Campus
1001 Grand Ave. W.
Chatham, Ontario N7M 5W4
Telephone (519) 354-9100

St. Lawrence College of Applied Arts and Technology

Brockville, Cornwall, Kingston

President: W.W. Cruden

Tri-campus Enrolment 1982-83
Full-time 5 277
Part-time 14 840

With three campuses, the college serves the six counties along the St. Lawrence River from Frontenac County in the west to Glengarry County on the Ontario-Quebec border.

St. Lawrence College at Brockville

Principal: J.M. Butt

Enrolment 1982-83
Full-time 897
Part-time 3 439

• Arts and Science – General and Applied

Two-year diplomas
Child care worker, mental retardation counsellor.

• Business

Three-year diploma
Business administration (options in finance and marketing).

Two-year diploma
Secretarial arts – executive, business – data processing.

One-year certificates
Retailing, stenographer.

• Health Sciences

Two-year diploma
Nursing.
Additional admission requirements: two advanced Grade 11, Grade 12 or Grade 13 science credits in biology, chemistry, physics, two Grade 11, Grade 12 or Grade 13 advanced English credits, one of which must be from Grade 12 or 13.

One-year certificate
Nursing assistant.

• Technology

Three-year diplomas
Electrical engineering technology.

Two-year diploma
Civil Engineering technology.
Additional admission requirements: credits must include level IV English and mathematics, level III sciences.

• Short programs
Basic training for skill development – levels 3 & 4, electrical telecommunications switching technician, electronics – digital equipment and systems, electronics technician non-semestered, electromechanical engineering technician/drafting non-semestered, English as a second language, health care aide, home support, industrial maintenance technician, junior programmer, post basic psychiatric nursing for nursing assistants.

• Alternative Learning

Academic Upgrading
See College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult calendar for details.

Assessment for Credit
A.L.E.C. – Assessment of Learning Experience For Credit. This is a concept where life experiences can earn college credits. Contact the Business Department for details.

Continuing Education
The Brockville Campus offers a variety of credit courses during the evening or day in business, creative arts, developmental education, health science, human studies, technology or trades areas. Contact the Registrar for details.

Management Development Centre
This centre develops and presents training for all levels of business and industry anywhere in Ontario.

CEIC Programs
A variety of programs of one year or less in duration are conducted under the sponsorship of the Canada Employment and Immigration Commission (CEIC). Some of these programs have been listed under the Short Programs section above. For complete listings, contact the Registrar.

Weekend College/Summer School
Grade 13 graduates can complete college credits in an intensive weekend schedule beginning in January followed by a six week summer session. This may qualify students for direct entry into the second year of a Business Administration program. Contact the Business Department for details.

Further Information
For more information about St. Lawrence College at Brockville, please contact
Registrar
St. Lawrence College at Brockville
2288 Parkedale Ave.
Brockville, Ontario K6V 5X3
Telephone (613) 345-0660

St. Lawrence College at Cornwall

Principal: A.L. Martin

• Arts and Science – General and Applied

Three-year diploma
Visual and creative arts – graphic design.

Two-year diplomas
Behavioural science – bilingual.

• Business

Three-year diplomas
Business administration, common first year – 2 semesters (options in data processing, finance, industrial/marketing) all offered bilingually.

Industrial marketing offers a co-operative program as well as the traditional program.

Additional admission requirements: four general mathematics and English credits recommended; for instruction in French, general or advanced Grade 12 français preferred.

Two-year diplomas
Business – accounting, marketing, industrial management, secretarial arts – common first year – 2 semesters (legal, medical, bilingual options).

Additional admission information: same as above.

• Health Sciences

Nursing.
This is a two to two and one-half year program.

Additional admission requirements: two advanced Grade 11, 12 or 13 biology, chemistry or physics credits, two Grade 11, 12, or 13 advanced English or one advanced English and one advanced French credit (one must be from Grade 12 or 13).

Certificate program – one semester (12 weeks)
Home support.

• Technology

Three-year diplomas (technology)
Electronics engineering, marine engineering, mechanical engineering, microcomputer engineering.

Two-year diploma (technician)
Instrumentation engineering (process control), electronics engineering.

Additional admission requirements: (both three- and two-year diplomas) credits for mathematics and English at the year 4 level and a science credit at the year 3 level; for instruction in French, Grade 12 French at the general or advanced level preferred. Microcomputer engineering – English, mathematics, physics and chemistry at the advanced level (e.g. 450) or equivalent.

Short Programs
BTSD – levels 1 to 4, English as a second language, French as a second language, introduction to non-traditional occupations computer software technician, drafting, electronics – digital equipment and systems, fabricating and welding, machine shop, stationary engineering – 3rd and 4th Class, welding fitter.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult calendar for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact college for details.

Pre-employment programs
Contact the college for information.

Further Information
For more information about St. Lawrence College at Cornwall, please contact
Admissions Office
St. Lawrence College at Cornwall
Windmill Point
Cornwall, Ontario K6H 4Z1
Telephone (613) 933-6080

St. Lawrence College at Kingston

Principal: G.K. Welch

Enrolment 1982-83

Full-time	2 585
Part-time	5 500

• Arts and Science – General and Applied

Three-year diplomas
Behavioural science technology, child care worker, fashion design, graphic design, animal care technology, medical laboratory technology.

Additional admission requirements: animal care and medical laboratory – Grade 12 advanced credits in mathematics, chemistry, and English plus one of either biology or physics at the advanced level in Grade 11 or higher.

Two-year diplomas
Correctional worker, early childhood education, visual and creative arts – fine arts.

• Business

Three-year diploma
Business administration (options in data processing, finance and marketing), fashion merchandizing.

Additional admission requirement: Grade 12 general level mathematics or equivalent is recommended.

Two-year diplomas
Business – advertising and public relations, business – accounting, business – marketing, business – human resources management, business – legal assistant, secretarial arts (legal and medical options).

Additional admission requirements: Business – advertising and public relations, business – human resources management and business – legal assistant – Grade 12 general level English.

One-year certificates
Secretary – legal and medical, junior programmer, stenographer, word processing secretary.

Additional admission requirements: 50 wpm typing, 80 wpm shorthand.

• Health Sciences

Two-year diploma
Nursing.

Additional admission requirements: two advanced Grade 11, 12 or 13 science credits in biology, chemistry, physics, two Grade 11, 12 or 13 advanced English credits (one must be from Grade 12 or 13).

One-year certificate
Nursing assistant.

• Technology

Three-year diplomas (technology)
Civil engineering, electronics engineering, instrumentation engineering, industrial, mechanical engineering.

Additional admission requirements: For all three-year technology programs – Level IV mathematics and English plus Level III science credit.

Two-year diplomas – technician
Mechanical engineering – applied machine shop, electronics engineering, instrumentation engineering – industrial.

Additional admission requirements: Level IV general mathematics and English plus Level III science credit.

• Short Programs
Short programs offered include: basic training for skill development – levels 1 to 4, basic job readiness, dining room service, English as a second language, food preparation basics, electronics (digital equipment and systems), electronics technician non-semestered, hairstylist, health care aide, post basic psychiatric nursing for nursing assistants, life skills coach, industrial orientation, industrial maintenance, introduction to non-traditional occupations, machine shop, mechanical engineering technician – applied machine shop (non-semestered), marine and small powered equipment mechanic, junior programmer, stationary engineering (4th and 3rd class), secretary (shorthand).

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section. Consult college calendar for details.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
St. Lawrence College at Kingston offers a range of day and evening courses including courses leading to college diplomas or certificates, advanced courses in technical and business fields for professional associations, and general interest courses, both leisure and career related. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact college for details.

Pre-employment programs
Consult college calendar for details.

Technology Learning Centre
Individualized programs of study are available for tradesmen, mechanics and technicians who work at their own pace with the help of short packages of learning materials. These may be in written form, or may be slides, video tapes and filmstrips. A tutor is available to give individual help as required.

Further Information
For more information about St. Lawrence College at Kingston, please contact
Registrar
St. Lawrence College at Kingston
Portsmouth Ave.
Kingston, Ontario K7L 5A6
Telephone (613) 544-5400

Sault College of Applied Arts and Technology

Sault Ste. Marie

President: Ron Doyle

Enrolment 1982-83

Full-time	1 910
Part-time	10 041

Sault College is located in the City of Sault Ste. Marie, and serves the District of Algoma. Sault college's concern for the natural resources of the environment is reflected in its college programs. The college also has strong technology, business, applied arts and health sciences programs covering wide areas of interest.

The Continuing Education Division of the college offers a wide range of courses, not only on the main Sault Ste. Marie Campus, but also on the college's satellite campuses at Elliot Lake and Wawa. Through these, many other locations throughout the District of Algoma receive programming.

Campus locations:

443 Northern Ave.
Sault Ste. Marie,
Ontario
P6A 5L3

3 Maple St.
P.O. Box 1490
Wawa, Ontario
T0S 1K0

12 Colwill Drive
Elliot Lake, Ontario

Programs Offered

• Arts and Sciences – General and Applied

Two- and three-year diplomas
Visual arts (majors in advertising art, fabric/fibre design, painting, pottery, printmaking), child care and adolescent worker (three years, part-time).

Additional admission requirements: visual arts – Grade 12 English at the general level.
Recommendations:
1) Applicants are invited to attend an information session or make alternate arrangements to familiarize themselves with the curriculum.
2) It is recommended that applicants submit samples, photos or slides of work.
3) It is recommended that applicants submit a paragraph on what they have done or hope to do in the art career field.

Additional admission requirements: child care and adolescent worker – OSSGD with Grade 12 English at the general level.
Procedures: qualified applicants will be required to:
1) attend an informal session that will include career information, program and course information, reading and writing samples to determine entrance level. If attendance at the information session is impossible, alternative arrangements must be made with the C.C.W. Department.
2) submit a medical certificate of good health. All procedural requirements must be completed before final admission will be granted. This is an extended day program.

Students may elect to pursue a part-time program. Part-time subjects areas are limited and offered at the discretion of the C.C.W. Department. Part-time students applying for full-time status will be viewed as new applicants and must satisfy all admission criteria.

Two-year diplomas
Early childhood education, mental retardation counsellor.

Additional admission requirements: Grade 12 English at the general level.
Procedures: qualified applicants will be required to:
1) attend an information session that will include career information, program and course information, field placement requirements, reading and writing samples to assist in determining entrance level. If attendance at information session is impossible alternative arrangements must be made with ECE or MRC Department.
2 a) demonstrate career awareness by indicating in writing what exposure he/she has had to the field (i.e. volunteer or part-time work or visitation to a centre. Submit this information at the MRC information session.
b) demonstrate career awareness by providing confirmation of having visited a pre-school or alternative centre or part-time/volunteer work in the ECE field. Submit this information at the ECE information session.
3) submit a medical certificate of good health.

All procedural requirements must be complete before final admission will be granted.

• Business

Two-year diplomas
Accounting, advertising management, electronic data processing, executive secretary, finance and sales management, hotel and restaurant management, legal secretary.

One-year certificates
Chef training, office procedures/retail sales.

• Health Sciences

Three-year diplomas
Nursing.

Additional admission requirements: Grade 12 English and Grade 10 mathematics at the general level, as well as two senior sciences one of which must be chemistry, and the other from among the following (biology, physics, human anatomy, physiology). At least one of the science credits must be at the advanced level.
Recommendations: overall academic achievement of applicants, based on an average of Grade 12 English and the two senior sciences, should be in excess of 70% if the applicant has subjects at the general level and 60% if the applicant has subjects at the advanced level.

To assist students in making decisions about a career, we recommend that students, prior to admission, should become knowledgeable about nursing through some exposure to nurses and the health care field, such as volunteer work, career day experiences with nurses, or other similar experiences.
Procedures: qualified applicants will be required to:
1) attend an information session that will include career information, the opportunity to discuss nursing as your career choice with a nursing instructor, program and course information. If attendance at the information session is impossible, alternative arrangements must be made with the Nursing department.
2) write a math test while attending information session. Entry level mathematics competencies have been identified for the Nursing program. Applicants who achieve below the stated competencies on the test will be required to participate successfully in some developmental education to achieve these competencies prior to September 30 of the year admitted. Copies of entry level competencies are available from the Chairman, Health Sciences.
3) submit a health review, immunization record and proof of tuberculosis test.

• Technology

Three-year diplomas (engineering technology)
Electrical engineering technology, electronic engineering technology, mechanical engineering technology, computer engineering technology.

Additional admission requirements: Grade 12 general mathematics (advanced mathematics strongly recommended) Grade 11 or 12 general physics.

Three-year diplomas (science and natural resources technology)
Forestry technology (fish and wildlife), forestry technology (parks and recreation), water resources engineering technology, pulp and paper engineering technology.

Additional admission requirements: forestry technician – Grade 12 English, mathematics at the general level.
Recommendations: completion of Grade 11 or 12 biology at the general level and mathematics at the advanced level are strongly recommended; pulp and paper engineering technician and water resources engineering technician – Grade 12 English, mathematics and chemistry at the general level.
Recommendations: physics at the general level and chemistry and mathematics at the advanced level are strongly recommended.

Two-year diplomas (engineering technician)
Architectural (drafting) technician, aviation technology (flight), construction engineering technician, electrical engineering technician, electronic engineering technician, mechanical engineering technician, mechanical engineering technician (drafting), civil engineering technician, mine ventilation technician, tool and die design technician.

Additional admission requirements: aviation technologist – four credits in mathematics, plus Grade 11 or 12 physics, Transport Canada medical examination and 20/20 uncorrected vision in both eyes; electrical engineering technician, electronic engineering technician, mechanical engineering technician, mechanical engineering technician (drafting) – Grade 12 general mathematics, Grade 11 or 12 general physics; architectural (drafting) technician, civil engineering technician, construction engineering technician, mine ventilation technician, tool and die design technician – Grade 12 general mathematics (business mathematics not accepted).

Two-year diplomas (science and natural resources technician)
Forestry technician, geology engineering technician.

Additional admission requirements: Grade 12 general mathematics (business mathematics not accepted).

One-year certificates (techniques)
Heavy equipment (diesel), machine shop, welding and fabricating.

Special admission requirements: Grade 10 general mathematics.

• Post Diploma Program

Infant toddler care and education.

Admission requirement: Graduation from an approved early childhood education program. Applicants with a diploma or degree in a related field will be considered on an individual basis.

• Alternative Learning

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Continuing education
A wide variety of credit and non-credit courses is offered in addition to supervisory and management courses and industrial training courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and contact college for details.

Retraining
College preparatory levels and skill prerequisites are available through upgrading or academic development studies for students who lack specific prerequisites. Contact college for further information.

Further Information
Additional information is available by contacting
Admissions and Academic Records Office
Sault College of Applied Arts and Technology
P.O. Box 60
Sault Ste. Marie, Ontario P6A 5L3
Telephone (705) 949-2050

Seneca College of Applied Arts and Technology

North York, York Region

President: Dr. W.T. Newnham

Enrolment 1982-83

Full-time	9 932
Part-time	24 820

Seneca College is a multi-campus institution serving Metropolitan Toronto, the City of North York, and the Region of York to the north of the metropolitan area.

Campus locations:

Newnham Campus
1750 Finch Ave. E.
Willowdale, Ontario
M2J 2X5

Jane Campus
2090 Jane St.
Downsview, Ontario
M3M 3E3

Sheppard Campus
43 Sheppard Ave. E.
Willowdale, Ontario
M2N 2Z8

Yorkdale Campus
2999 Dufferin St.
Toronto, Ontario
M6B 3T4

King Campus
Dufferin St. N.
R.R. 3
King City, Ontario
L0G 1K0

Leslie Campus
1255 Sheppard Ave. E.
Willowdale, Ontario
M2K 1E2

Lawrence Campus
1780 Lawrence Ave. W.
Toronto, Ontario
M6L 1C7

Dufferin Campus
1000 Finch Ave. W.
Downsview, Ontario
M3J 2V5

Glen Rush Campus
77 Glen Rush Blvd.
Toronto, Ontario
M5N 2T8

Fairmeadow Campus
17 Fairmeadow Ave.
Willowdale, Ontario
M2P 1W6

Programs Offered

• Arts and Science – General and Applied

Three-year diplomas
Design arts, fashion arts, recreation facilities administration.
Additional admission requirements: Grade 12 English, group orientation session, questionnaire and portfolio/testing; design arts – art or drafting credits desirable; recreation facilities administration – college diploma in recreation facilities management or equivalent.

Two-year diplomas
Audio-visual techniques (production, technical, marketing options), broadcasting (radio and TV), coaching techniques (gymnastics, figure skating), cosmetics, creative advertising, design illustration, early childhood education, fashion merchandising, flight services (three semesters), golf course technician, government administration, harness horse industry operations, law enforcement, legal administration, library techniques, outdoor recreation technician, parks operations and services, real property administration, recreation facilities management, visual merchandising arts.
Additional admission requirements: law enforcement, recreation facilities management, golf course technician, harness horse industry operations, outdoor recreation technician, parks operation and services, fashion merchandising, visual merchandising arts, legal administration – Grade 12 English, group orientation session, questionnaire. In addition to Grade 12 English, group orientation and questionnaire, the following programs have further requirements; audio-visual techniques – drafting, technical, electronics and art, film, communication arts; broadcasting (radio and TV) – social sciences credits desirable; coaching techniques – practical test to demonstrate competency in gymnastics or figure skating depending on option selected; cosmetics – no allergic reaction to any cosmetic product; creative advertising – basic typing skills recommended; design illustration – art or drafting credits desirable; early childhood education – satisfactory tuberculin test and chest x-ray; flight services – Grade 12 French or equivalent; library techniques – typing and art credits recommended.

One- to three-year program
College vocational program.
Special admission requirements: candidates must have successfully completed a high school vocational or occupational program, be recommended by the principal, be age 17 during the first year of the course. Interview with candidate and parents or guardian(s).

One-year certificate
Cosmetics.
Additional admission requirements: Grade 12 English, group orientation session, questionnaire, no allergic reaction to any cosmetic product.

• Business

Three-year diplomas
Accounting and finance, business administration, computer programming and analysis (co-op and electronic data processing – auditing options are available), international business, marketing administration, small business administration, tourist industry administration.
Additional admission requirements: Grade 12 English and mathematics, group orientation session, questionnaire, mathematics testing; tourist industry administration – questionnaire, orientation session.

Two-year diplomas
Accounting, computer programming and operating, general business, marketing, secretary (bilingual, executive, legal, medical), small business management, tourism studies, word processing-correspondence specialist.
Additional admission requirements: Grade 12 English; accounting, computer programming and operating, general business, marketing, small business management – Grade 12 mathematics, group orientation session, questionnaire, mathematics testing; bilingual secretary – Grade 12 French or equivalent; tourism studies – group orientation session, questionnaire, Grade 12 mathematics.

One-year certificates
General dicta-typist, human resources management, medical dicta-typist, secretarial (executive, legal, medical), word processing-correspondence specialist, word processing operator (legal), international business management.
Additional admission requirements: Grade 12 English; human resources management, international business management – college diploma or mature student with three years work experience; secretarial (executive, legal) – 45 wpm typing, 80 wpm shorthand in any approved system, skills test; word processing-correspondence spe-

cialist, medical dicta-typist, word processing operator (legal), secretarial (medical) – 45 wpm typing, transcription ability, production typing skills, skills test.

• Health Sciences

Two and one-half year diploma
Nursing.
This program leads to a Diploma in Nursing and, upon successful completion of the examination set by the College of Nurses of Ontario, certification as a registered nurse.

Additional admission requirements: Grade 10 mathematics (minimum), Grade 12 English and at least two of the following senior level sciences – chemistry, biology, physics; group orientation session, testing.

One-year diploma
Dental hygiene.

Additional admission requirements: college Dental Assisting Certificate (level 1) or equivalency as determined by the college. Work experience is a major weighting factor in the admission/selection procedure.

One-year certificate
Dental assisting.

Additional admission requirements: Grade 12 English, group orientation session, testing, Grade 11 or 12 biology and chemistry are strongly recommended.

Animal health technician.

Additional admission requirements: Grade 12 English, mathematics, chemistry, Grade 11 biology, (all at the advanced level), questionnaire, group orientation session. Pre-exposure series of inoculations against rabies is required prior to registration.

• Technology

Three-year diplomas (technology)
Aviation and flight (eight continuous semesters over three years)

Additional admission requirements: Grade 12 English, Grade 12 advanced level mathematics, Grade 11 or 12 physics and chemistry, college mathematics test, 20/50 uncorrected vision for each eye, correctable to 20/20, certificate of medical fitness. Candidates should request detailed information concerning entrance requirements. Persons currently holding, or who will be holding prior to September registration, a commerical pilot's licence (rotary or fixed wing) are *not* eligible for admission to the aviation program.

Biological research, chemical (co-op program), civil engineering (marine option), electronics engineering (options in communications, nuclear power and control), fire protection, laboratory, mechanical engineering (option in nuclear power), pharmaceutical chemistry, resources engineering (marine option).

Additional admission requirements: Grade 12 mathematics, English; civil, resources engineering – Grade 11 or 12 physics or chemistry (Grade 11 or 12 geography recommended for resources engineering, diving certificate recommended for marine option of resources engineering); electronics and mechanical – Grade 11 or 12 physics (Grade 11 or 12 chemistry recommended); laboratory, chemical, pharmaceutical chemistry, biological research – Grade 11 or 12 chemistry (Grade 11 or 12 physics and biology recommended).

Two-year diplomas
Biological chemical technician, cartographic technician, civil engineering, electronics engineering (communications, computers and avionics options), fire protection, mechanical engineering, resources engineering.

Additional admission requirements: Grade 12 English and mathematics; biological chemical technician – Grade 11 or 12 chemistry (Grade 11 or 12 biology and physics recommended); cartographic technician – college questionnaire (Grade 11 or 12 geography recommended); civil engineering, electronics engineering, mechanical engineering – Grade 11 physics desirable; resources engineering – Grade 11 or 12 geography recommended.

One-year certificate
Underwater skills, precision machining.

Additional admission requirements: Grade 12 mathematics and English; underwater skills, Grade 11 or 12 physics, group orientation session, certification as a sports scuba diver (level 2), questionnaire, testing; precision machining, Grade 12 machine shop and drafting, orientation session, questionnaire.

• Alternative Learning

Continuing education
Diploma and certificate level study, vocational subjects, special interest subjects and college preparatory courses are offered. For an up-to-date list of courses consult the college calendar. Also see the Continuing Education in the General Information on Colleges of Applied Arts and Technology section for a general description.

Academic upgrading/college preparatory programs
For students wishing to register in post/secondary programs but who do not have the OSSGD, academic upgrading programs are offered at the Newnham, Lawrence, King and Sheppard Campuses. Students must be 19 years of age on or before the first day of classes.

The Centre for Independent Learning (C.I.L.),
1150 Finch Avenue East,
Willowdale, Ontario M2J 2X5.
The Centre for Independent Learning, located in the Newnham campus, is designed to provide post-secondary educational opportunities to those people whose work or personal commitments make it impossible to attend regularly scheduled classes on campus. As well, the flexible, self-paced format of the Centre's courses allows the student to complete required study objectives in a shorter or longer period of time than the traditional semester. Small group seminars, individual tutorials, and independent work assignments replace the formal scheduled classroom lectures which can be taken during the day and/or evening, including Saturday mornings.

The following full-time post-secondary programs are offered through the C.I.L.: business administration, general business, tourism studies, computer studies.

Occupational training
Accountancy assistant, bookkeeping-typist, clerk-typist, commercial refresher, college preparatory program/academic upgrading, computer programmer, dicta-typist, drafting, electronics (options in radio, hi-fi and TV servicing, mobile radio, cable TV service and maintenance, digital electronics); English as a second language, environmental horticulture, farrier, floral design, hyperbaric chamber operator, industrial maintenance mechanic, machine shop, receptionist, secretary (legal, medical, shorthand), underwater skills, word processing operator, family care worker, introduction to non-traditional occupations, rehabilitation through education, basic job readiness training.

Admission requirements: the basic admission requirement for all programs is mature student status, age 19 or over on the first day of classes. Each potential student is given functional tests by the college in order to determine aptitude and ability for the program of instruction desired by the student.

Further Information
Additional information is available by contacting the college (see *Campus locations* for addresses)
Newnham Campus
Registrar's Office
Telephone (416) 491-5050 ext. 339 or 340

King Campus
Registrar's Office
Telephone (416) 833-3333 (calling from Metro Toronto or King City)
1-800-263-2060 (calling outside Metro Toronto or King City)

Sheppard Campus
Admissions Office
Telephone (416) 491-5050, ext. 293

Lawrence Campus
Admissions Office
Telephone (416) 491-5050, ext. 691

Leslie Campus
Student Services Office
Telephone (416) 494-8900

Yorkdale Campus
Registrar's Office
Telephone (416) 491-5050, ext. 641

Jane Campus
Telephone (416) 247-8281

Glen Rush Campus
Telephone (416) 781-5237

Dufferin Campus
Telephone (416) 491-5050

Sheridan College of Applied Arts and Technology

Oakville

President: Donald A. Shields

Enrolment 1982-83

Full-time	6 981
Part-time	40 099

Sheridan College serves the two growing regions of Halton and Peel, between Hamilton and Toronto. The School of Crafts and Design in Mississauga is the only school in Ontario devoted exclusively to crafts and Sheridan's Heavy Equipment School in Milton has developed one of the best equipped heavy equipment training facilities in North America.

The Community Services Division has experienced tremendous growth in the area of adult education which offers part-time, day and evening courses at ten campuses. Skills Development Apprenticeship programs, sponsored by the Canada Employment and Immigration Commission are offered at campuses in Brampton, Mississauga and Oakville.

Sheridan re-opened the Oakville South Campus to house women's programs (introduction to non-traditional careers, women into trades and technology, and focus for change) in January 1983.

Campus locations:

Oakville Main Campus
Trafalgar Rd.
Oakville, Ontario
L6H 2L1

Brampton Campus
McLaughlin Rd.
Box 7500
Brampton, Ontario
L6V 1G6

Lorne Park Campus
School of Crafts and Design
1460 South Sheridan Way
Mississauga, Ontario
L5H 1Z7

Argus Road Campus
572 Argus Rd.
Oakville, Ontario
L6J 3J3

Milton Campus
Heavy Equipment School
RR 3
Milton, Ontario
L9T 2X7

Burlington Campus
2319 Fairview Ave.
Burlington, Ontario
L7R 2E3

Credit Valley Campus
School of Nursing
2186 Hurontario St.
Mississauga, Ontario
L5B 1M9

Queen Elizabeth Campus
178 South Service Rd. E.
Oakville, Ontario
L6J 2X5

Mississauga Campus
1 Port St. E.
Mississauga, Ontario
L5G 4N1

Oakville South Campus
216 Lakeshore Rd. E.
Oakville, Ontario
L6J 1H8

Centre for Women: The Sheridan College Centres for Women at the Oakville and Brampton Campuses are designed as resource, referral and personal development areas for women of all ages, backgrounds, and occupations, in the college as well as the community. They provide assistance, resource material and information on social issues such as law reform, status of women in the work force, day care problems, etc. The centres also sponsor and organize personal and professional development activities for women.

Brampton Campus

• Arts and Science – General and Applied

Three-year diploma
Visual arts – illustration (interpretive, technical options).

Two-year diplomas
Correctional worker, early childhood education (Montessori or nursery), general arts and science (children: our challenge), general studies, law and security administration, retail management, social service worker.

Beginning in Sept. 1982, a child studies common semester was introduced, providing students with an opportunity to explore two areas of concentration; children: our challenge and early childhood education. Students will then be able to make a well-informed program choice in the second semester.

• Business

Three-year diploma
Business administration (accounting, finance, corporate administration, marketing, traffic management and distribution options).

Additional admission requirements: business administration – Grade 12 English required and Grade 12 mathematics preferred.

Two-year diplomas
Business, (accounting, marketing, general options), hotel and restaurant management, secretarial arts (executive, legal and medical options), microcomputer management, word processing procedures and administration.

Additional admission requirements: microcomputer management – Grade 12 mathematics and English.

• Technology

Three-year diploma (technology)
Engineering (chemical – general and instrumentation and process control option, electronics and mechanical engineering).

Additional admission requirements: senior level chemistry and physics, Grade 12 mathematics. Students with four Grade 13 credits and 60% in two mathematics, physics and chemistry are eligible for direct entry into year 2 with the understanding that they are required to obtain credits for electricity ELY5100, English and Media Studies EMS7101 and 7102 and Computer Science CSC3120 prior to graduation from the technology program.

Two-year Diplomas (technician)
Chemical (laboratory), civil engineering (construction), drafting engineering, electronics engineering (microcomputer option), mechanical engineering.

Additional admission requirements: chemical (laboratory) – Grade 12 mathematics and chemistry; civil engineering (construction), drafting engineering (architectural, mechanical), electronics engineering, mechanical engineering – Grade 12 mathematics.

One-year certificates
Animal care, major appliance service technician, microcomputer applications (post basic).

Additional admission requirements: animal care – one senior level biology and chemistry; microcomputer application – graduation from a two-year post-secondary computer-oriented program required.

Three-month certificates
Sales – instrumentation and process control (post-basic).

Additional admission requirements: applicants must be graduates of a three-year CAAT post-secondary technology program or equivalent.

Special Programs
Electronic engineering technician (microcomputer option) is designed to train persons capable of performing on-site and in-factory repairs, testing and maintenance on microcomputers. The one-year animal care and major appliance service technician programs are unique in Ontario. The microprocessor applications program provides a thorough foundation in hardware concepts and skills required to become an effective designer of computer-based applications.

Oakville Campus

• Arts and Science – General and Applied

Two-year diplomas
Advertising, athletic training and management, Canadian nanny, early childhood education (Montessori or nursery option available), general arts and science (children: our challenge), human services administration, journalism – print, law and security administration, liberal and general studies, library techniques, research techniques, social service worker.

Students applying for the social service worker, correctional worker (Brampton), law and security administration, research techniques and human services administration programs are admitted to a common first semester (human studies). Admission to the second semester is determined by personal suitability and successful completion of the human studies semester.

Similarly, a child studies common semester provides students with an opportunity to explore three areas of concentration: Canadian nanny, children: our challenge and early childhood education. Students will then be able to make a well-informed program choice in the second semester.

Direct entry into second year of journalism and research techniques is offered to post-secondary students who have completed degree or diploma studies.

Additional admission requirements: athletic training and management – senior biology (advanced level), questionnaire, and program orientation.

One-semester certificates
Developmental care for the mentally retarded, gerontology (a multidisciplinary post-basic training involved in working with the elderly in community and institutional settings).

Additional admission requirements: applicants must have related post-secondary education or employment in a related field.

English and Media Studies

Two-year diplomas
Media arts (writing elective), performance studies (drama, music theatre, technical and production theatre).

Additional admission requirements: media arts – interview; writing elective – interview, portfolio, music theatre, drama, audition; technical and production theatre – backstage experience.

Special programs
Media fundamentals is a discovery year, during which students are exposed to the fundamental skills required for admission to the diploma programs. The media arts writing elective develops editing and publishing skills applied to media, performing and visual arts.

Fashion Arts

Fashion technique and design (knit and clothing options), professional modelling and related careers, retail management, visual merchandising arts.

Additional admission requirements: fashion technique and design – art/sewing background desirable; professional modelling and related careers – minimum height female (169cm), male (177cm to max. 183cm); retail management – Grade 12 mathematics and English recommended; visual merchandising – an art course recommended.

Special Programs
Visual merchandising arts is a unique two-year program to train visual merchandising specialists who promote store sales through window and floor displays.

Visual Arts

Three-year co-operative degree/diploma
Art and art history, offered in conjunction with Erindale College (University of Toronto). Graduates receive a BA from Erindale (completion of 10 credits) and a diploma in art and art history (five credits) from Sheridan. In order for the student to be eligible for a Type A Certificate (Faculty of Education), a 4-year degree with a Specialist Program in Fine Art (studio) is available.

Additional admission requirements: Applicants must apply to both Sheridan and Erindale and must meet admission requirements at both colleges. Acceptable Grade 13 standing is necessary for admission to Erindale.

Three-year diplomas
Animation, graphic design.

Two-year diploma
Applied photography.

Additional admission requirements: Visual arts students are usually required to have formal art training in secondary school. They may be required to submit a portfolio for assessment or have an evaluation of talent through a personal interview. In most cases, questionnaires will be used as a selection procedure.

One-year certificates
Art fundamentals.

Special programs
Animation, a three-year program, is the only one of its kind in North America. Art and art history, a three-year major or four-year specialist co-operative program between Sheridan and Erindale College (University of Toronto), provides students with academic background and practical training in the visual arts. Art fundamentals is a one-year certificate program for students with no formal art background.

Computer graphics, a one-year program limited to those with previous computer background or two years post-secondary education in visual arts.

• Business and Secretarial

Three-year diplomas
Business administration (accounting, finance, marketing, traffic management and distribution, corporate administration options).

Two-year diplomas
Business (accounting, general and marketing options), secretarial arts (executive, legal and medical options), word processing procedures and administration and motor carrier administration.

One-year certificate
Intensive secretarial studies.

• Computer Studies

Three-year diplomas
Computer science technology (first year Brampton), business computer systems.

Two-year diplomas
Electronic data processing, microcomputer management.

Additional admission requirements: Grade 12 mathematics and English are required for all programs. In addition, computer science technology requires Grade 12 chemistry and Grade 11 physics.

Secondary school graduates with at least four Grade 13 subjects, including accounting and mathematics credits with a grade of at least 60%, will be considered for direct entry into second year of the business computer systems. Applicants with an OSSGD (or standing in at least four Grade 13 courses, including 60% in two mathematics and one science credit, will be considered for direct entry into second year computer science technology).

Special Programs
Microcomputer management is a unique two-year program designed to produce graduates who can combine a solid business background with extensive microcomputer knowledge to make the most of an employer's microcomputer system. Grade 12 mathematics and English required.

Lorne Park Campus School of Crafts and Design

• Arts and Science – General and Applied

Three-year diploma
Crafts and design (studio specialization in ceramics, fabrics, furniture, glass, jewelry and metal).

Additional admission requirements: Those with past craft education and/or experience may be considered for direct entry into year 2 of the program.

Credit Valley Campus

• Health Sciences

Three-year diploma
Diploma nursing.

Additional admission requirements: Grade 12 mathematics and English plus senior level science credits in two of chemistry, physics or biology. Selection procedures involve a questionnaire and testing in mathematics and English. Achievement levels (grades) earned in the prerequisite courses will be "factored" into the applicant's admission profile.

Milton Campus

• Technology

Two-year diploma
Heavy equipment construction techniques.

Additional admission requirements: Grade 12 mathematics required.

• Alternative Learning

The aim of Community Services at Sheridan College is to make the resources of the college available to as many people of the community as possible. Having three major divisions, Community Services administers various programs which are geared to the needs of adults in the Peel-Halton community.

Academic upgrading
For programs, see the CAAT chart at the beginning of this section. For a general description, see College Preparatory Programs for Academic Upgrading in the General Information on Colleges of Applied Arts and Technology section or contact the college's Skills Development Apprenticeship Division.

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section. Contact the Skills Development Apprenticeship Division at the college for further information.

Continuing education
The Continuing Education Division offers seminars and workshops as well as credit and non-credit courses. See Continuing Education in the General Information on Colleges of Applied Arts and Technology section and consult college calendar for details.

Apprenticeship, Retraining and Skills Training Development
Along with academic upgrading and apprenticeship programs, this division offers commercial refresher courses as well as mechanical and technical programs which provide students with marketable skills. For further information contact the college's Skills Development Apprenticeship Division.

Training and Leadership Development Division
This division aims to meet the needs of local industries by providing in-plant courses to upgrade the knowledge and skills of employees at a minimal cost.

Additional Costs
The estimated cost of books, supplies and instruments for the academic year varies from $10 to $2 500, depending on the type of program. Please consult the college calendar or phone for more information.

Further Information
Please contact
Registrar or Information Services
Sheridan College of Applied Arts and Technology
Trafalgar Rd.
Oakville, Ontario L6H 2L1
Telephone
(416) 845-9430 (Oakville)
(416) 823-9730 (Clarkson)
(416) 632-7081 (Burlington)

Sir Sandford Fleming College of Applied Arts and Technology

Peterborough, Lindsay

President: Dr. Charles E. Pascal

Enrolment 1982-83
Full-time 3 889
Part-time 14 336

Sir Sandford Fleming College serves Peterborough, Victoria, and Haliburton Counties as well as Northumberland County's Hamilton Township. It is best known for its forestry and natural resources programs, offered through the School of Natural Resources, Frost Campus, Lindsay, Ontario. The college also offers several unique programs in technology, business, applied arts and nursing areas.

Campus locations:

Sutherland Campus
Brealey Dr.
Peterborough, Ontario
K9J 7B1

Lakeshore Campus
King St., Box 754
Cobourg, Ontario
K9A 4R5

School of Natural Resources
Frost Campus
Box 8000
Lindsay, Ontario
K9V 5E6

Northern Campus
Box 339
Haliburton, Ontario
K0M 1S0

Sutherland Campus
526 McDonnel St.
Peterborough, Ontario
K9J 7B1

Sutherland Campus

• Applied Arts

Two-year diplomas
Customs administration, law enforcement, correctional worker, recreation leadership, early childhood education, social service worker.
Additional admission requirements: other selection criteria and procedures may be used to determine the student's personal suitability for the field.

• Civil and Drafting

Three-year diplomas (technology)
Civil engineering, metallurgical engineering (materials testing).
Additional admission requirements: (see ** below).

Two-year diplomas
Metallurgical engineering (materials testing) technician, mechanical engineering technician (drafting design), civil engineering technician.
Additional admission requirements: (see *** below).

• Communications

Two-year diplomas
Creative arts administration, general arts and science.

• Data Processing and Secretarial Arts

Three-year diplomas
Business administration (data processing).
Additional admission requirements: (see * below).

Two-year diplomas
Business (data processing), secretarial arts (executive, legal, medical).
Additional admission requirements: business – Grade 12 mathematics and English; secretarial arts – Grade 12 English.

One-year certificates
Secretarial arts (executive, legal, medical).
Additional admission requirements: secretarial arts – Grade 12 English, 50 wpm typing, 80 wpm shorthand. Applicants may take the executive or medical options without shorthand if they wish to take machine transcription.

• Electrical and Electronic

Three-year diplomas (technology)
Electrical engineering, electronics (computer) engineering.
Additional admission requirements: (see ** below).

Two-year diplomas
Electrical engineering technician, electronics engineering technician.
Additional admission requirements: (see *** below).

• Health – Science Laboratory – Art Conservation

Three-year diplomas
Art conservation techniques, nursing.
Additional admission requirements: art conservation techniques – secondary school background in chemistry or art, test for manual dexterity and colour perception; nursing – senior level English, chemistry, and physics or biology.

Two-year diplomas
Science (laboratory) technician.
Additional admission requirements: Grade 12 mathematics, English and science.

• Management and Finance

Three-year diplomas
Business administration (accounting, materials management, general specialization.)
Additional admission requirements: (see * below).

Two-year diplomas
Business (accounting, general specialization.)
Additional admission requirements: Grade 12 mathematics and English.

• Mechanical

Three-year diplomas (technology)
Electro-mechanical engineering technology (robotics).
Additional admission requirements: (see ** below).

Two-year diplomas
Mechanical engineering technician (tool and die).
Additional admission requirements: (see *** below).

• Merchandising and Hospitality

Three-year diplomas
Business administration (marketing management), tourism and transportation (hospitality and travel specializations).
Additional admission requirements: (see * below).

Two-year diplomas
Food and beverage management, fashion merchandising, food services, recreational merchandising.

One-year certificates
Retailing.

Frost Campus

• Natural Resources

Three-year diplomas
Fish and wildlife technology, forest technology, forest recreation technology, geotechnical technology, thematic cartography.
Additional admission requirements: fish and wildlife technology, forest technology, forest recreation technology, geotechnical technology, thematic cartography – appropriate technician diploma.

Two-year diplomas
Cartographic technician, farm management, fish and wildlife technician, forest recreation technician, forestry technician, general arts and science, geological technician, heavy equipment technician, pest control technician, resource drilling technician.
Additional admission requirements: mathematics and English (two of biology, chemistry/physics recommended).

Haliburton School of Fine Arts

A variety of arts and crafts courses is offered during July and August and weekend workshops are offered in the fall.
For registration and information please write to
Haliburton School of Fine Arts
P.O. Box 339
Haliburton, Ontario K0M 1S0

*Additional admission requirements: business administration programs – Ontario Secondary School Graduation Diploma program with credits in English and mathematics. Students with an Ontario Secondary School Honour Graduation Diploma, with credits in mathematics and English, may enter the second year of the program upon successful completion of a four-week pre-admission course in August.

**Additional admission requirements: technology programs – an Ontario Secondary School Graduation Diploma with Grade 12 advanced level mathematics, English, and physics or chemistry. Students with an Ontario Secondary School Graduation Diploma with credits in mathematics, English and physics or chemistry at the general level will be considered on an individual basis. Students with an Ontario Secondary School Honour Graduation Diploma with Grade 13 calculus, English, physics and chemistry may enter the second year of the programs. This may be conditional on successful completion of a two-week pre-admission course in August.

***Additional admission requirements: technician programs – Grade 12 mathematics and English, and Grade 11 or 12 science; mechanical engineering technician (tool and die) – science may be replaced by Grade 11 and 12 double machine shop.

• Programs Considered for 1983-84

Hospitality management, loss prevention management, photographic merchandising, travel and merchandising, industrial technolgist, personnel administration, women in trades and technology, numerical control machine tool programmer.

• Alternative Learning

Apprenticeship
For programs, see the CAAT chart at the beginning of this section. For details, see the Apprenticeship section.

Career and industrial studies
A variety of federal and provincial training programs are offered, as well as custom designed courses for business and industry.
Inquiries should be directed to
Career and Industrial Studies
Sir Sandford Fleming College
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620

Continuing education
Sir Sandford Fleming College offers comprehensive continuing education evening programs in applied arts, business, health studies and technical areas. Many non-credit subjects of general interest are offered in Peterborough, Lindsay, Cobourg, Haliburton and other areas.
Inquiries should be directed to
Continuing Education
Sir Sandford Fleming College
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620

• Employment training

Sir Sandford Fleming College's employment training programs maintain an emphasis on the individual student. The academic upgrading program and commercial training programs are presented in individual learning modules. This allows the student to begin a program on the first day of the week and to progress at his or her own rate.

A variety of programs are offered, such as:
a) basic training for skill development – from semi-literacy to college entry;
b) commercial training – refresher, bookkeeper-typist, word processing operator;
c) technical – advanced carpentry, machine tool technology and practice, marine and small powered equipment mechanics, introduction to non-traditional occupations, welder fitter, hardwood lumber inspection, drilling and blasting, forest nursery worker;
d)new technology – computer operator, geographic information systems technician, electronic engineering technician (telephone systems), electronic engineering technician (microcomputer service), electro-mechanical engineering technician (robotics), electrical engineering technician (controls), mechanical engineering technician (drafting design).

Inquiries should be directed to
Admissions Office
Sir Sandford Fleming College
Sutherland Campus
526 McDonnel St.
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620

Further Information
For further information on admission requirements and full-time post-secondary programs offered, please contact
Admissions Officer
Sir Sandford Fleming College of Applied
Arts and Technology
Sutherland Campus
526 McDonnel St.
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620
or
Admissions Officer
Sir Sandford Fleming College of Applied
Arts and Technology
School of Natural Resources
Frost Campus
P.O. Box 8000
Lindsay, Ontario K9V 5E6
Telephone (705) 324-9144

Information on student financial assistance may be obtained from
Financial Aid Officer
Sir Sandford Fleming College of Applied
Arts and Technology
Sutherland Campus
Brealey Dr.
Peterborough, Ontario K9J 7B1
or
Financial Aid Officer
Sir Sandford Fleming College of Applied
Arts and Technology
School of Natural Resources
Frost Campus
P.O. Box 8000
Lindsay, Ontario K9V 5E6

Apprenticeship

What is apprenticeship?
Put simply ... apprenticeship is a system of on-the-job training.

Both the person who is learning and the employer who is training get a lot out of apprenticeship. The apprentice becomes a journeyman, with skills that can provide him or her with a rewarding career. The employer gains a skilled worker who can help the company succeed.

Apprenticeship is a proven way to train. It has a long tradition, but it is as important today as it ever was. Canadian journeymen, trained through apprenticeship, have been part of the teams that created:

- the space arm on the shuttlecraft
- the CN Tower, the world's tallest free-standing structure
- the Urban Transport Development Corporation train – the train of the future, and
- gourmet meals for world-renowned restaurants and hotels.

Journeymen, trained through apprenticeship, also bake your bread, fix your car, build your home and print what you are reading now. Apprentices learn these skills by doing.

Apprenticeship training is administered by the Skills Development Division of the Ministry of Colleges and Universities, under the Apprenticeship and Tradesmen's Qualification Act.

Learn by doing, and earn at the same time!
The best way to learn something is to do it! That's the basis of apprenticeship. Depending on the skilled trade, the length of your training will vary between two and five years. During that time, the employer will pay you a percentage of the current journeyman's wage. As your productivity improves with increasing skill, so does the pay, which, of course, would never be less than Ontario's minimum wage.

All but about 10 per cent of the apprenticeship program will consist of on-the-job training. The remainder is usually spent at a college of applied arts and technology which provides additional instruction needed to complete your training. Apprentices attending college may receive financial support from the Canada Employment and Immigration Commission, under the Canada-Ontario training agreement of 1982.

The following pages show, for each trade, the number of hours you will spend on the job and in the classroom. Also listed for the major trades are the skills you will learn during your apprenticeship.

Choose a trade
There are more than 60 skilled trades regulated in Ontario, each with its own apprenticeship training program.

Regulated trades are governed, as the term implies, by Ontario regulations under The Apprenticeship and Tradesmen's Qualification Act. These regulations outline the standards and conditions of training for specific trades.

There are about 270 non-regulated trades which have, as the term suggests, no formal regulations. Training for these trades is often designed to meet specific requirements of particular jobs.

The regulated and non-regulated trades are described in four categories: construction, industrial, motive power, and service. In addition, there is a list of miscellaneous non-regulated trades at the end of this section.

What are the entrance standards?
For most trades, the minimum educational requirement is Grade 10. Employers and unions, however, may insist that the applicants have higher academic standards, with credits in specific subjects.

How long does an apprenticeship last?
The duration of an apprenticeship is measured in hours: for example, 9 000 hours for a motor vehicle mechanic, 8 000 hours for a tool and die maker, 3 600 hours for an automotive painter.

The training is divided into periods: for example, five periods of 1 800 hours each for a motor vehicle mechanic, four periods of 2 hours each for a tool and die maker, two periods of 1 800 hours for an automotive painter.

Credits for academic and skill achievement
Academic and skill achievement beyond the minimum level required for a particular trade can often reduce the on-the-job time spent in apprenticeship.

A training consultant from the regional office of the Skills Development Division may recommend that you be granted a credit of 50 hours toward each apprenticeship period for each trade-related credit you achieved in high school or college. The consultant may also recommend that you be given similar credit for each secondary school grade achieved beyond the minimum entry level for the trade selected. Usually, seven credits make up one academic grade, with 110 to 120 hours of scheduled classroom instruction involved in each credit. The Skills Development Division training consultant will identify these credit subjects.

Find an employer ... become an apprentice
In order to become an apprentice, you must first find an employer who will agree to provide training. Check with the local Canada Employment Centre for information on job opportunities for apprentices in specific trades or areas of the province. The Skills Development Division training consultant may be able to identify employers who wish to hire an apprentice. Then, it's up to you!

When you are hired as an apprentice, you are required to sign a contract with your employer which specifies the conditions for work, hours, wages, and training. If you are under 18 years of age, a parent or guardian must also sign the contract, since it is a legal agreement between you and the employer. The Skills Development Division retains a copy of this contract.

Throughout your training, the training consultant is available for discussion with you and the employer and to ensure adequate training, rates of pay, and working conditions.

Certificate of Apprenticeship and Certificate of Qualification
Upon successful completion of your apprenticeship training you will be issued a Certificate of Apprenticeship. In regulated trades, a Certificate of Qualification is also available. About 20 regulated trades have interprovincial standards, and a mark of 70 per cent or higher on your final examination will entitle you to receive an Interprovincial Red Seal, which permits you to practise your trade in any Canadian province without further examination. Trades in which a Red Seal is available are marked with an asterisk (*).

Compulsory and voluntary certification
In certain regulated trades, certification is *compulsory*: only holders of a Certificate of Qualification or registered apprentices can practise these particular trades. Compulsory certification trades include electrician, plumber, motor vehicle mechanic, to name a few.

Regulated trades with *voluntary* certification, such as cook, tool and die maker, farm equipment mechanic, and construction millwright, do not require their practitioners to have a Certificate of Qualification. However, this certificate does indicate that the holder has reached a certain level of skill and expertise in his or her trade.

More information
For more detailed information on the apprenticeship system, specific trades and their training schedules, obtain a copy of *Apprenticeship and You* from your guidance counsellor, or contact the nearest regional office of the Skills Development Division, listed at the end of this section.

Women in skilled trades

YES I CAN!
This short documentary film about successful women apprentices and journey(wo)men helps dispel the male mystique that too often surrounds certain trades. With cheerful good humour, the subjects describe the joys and frustrations of working at traditionally "male" occupations. For more information, telephone Training at (416) 965-5694.

• Construction Trades Regulated

Brick and Stone Mason
Educational requirements
Grade 8 or equivalent.

Length of program
Four periods of 1400 hours, including three periods of 8 weeks each.

Duties and skills
Constructs and erects walls, arches, fireplaces, chimneys, smokestacks, and other items of brick and stone masonry components; lays firebrick and other refractory materials in walls and arches in the construction of furnaces, or in lining furnaces and retorts, or in enclosing boilers, tanks, and heat-treating furnaces.

Cement Mason
Educational requirements
Grade 8 or equivalent.

Length of program
Three periods of 2000 hours each.

Duties and skills
Finishes concrete flooring by hand or with mechanical equipment, including the application of curing and surface treatments; carries out all phases of waterproofing and restoration of concrete; rubs up and repairs hardened concrete surfaces; places and finishes epoxy, plastic, and other composition materials; finishes and exposes aggregate in pre-cast and architectural concrete.

Construction Boilermaker
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1650 hours, including three in-school sessions of 8 weeks each.

Duties and skills
Lays out, assembles, and erects boilers, pressure vessels, and heat exchangers, and repairs component parts; reads and understands drawings, specifications, technical literature, and manufacturers' and safety regulations; fits plates, connects steel members, drills, reams, bolts, rivets, welds, and rigs; stress relieves and tests pressure vessels and enclosures using air, water, smoke, and other methods.

Construction Millwright
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours, including three periods of 8 weeks each.

Duties and skills
Installs, repairs, and maintains mechanical machines, their components, and related devices and systems in industrial plants, commercial and institutional buildings, or construction sites; has a broad knowledge of metallurgy, welding, blueprint reading, and the use of precise measuring instruments.

Electrician (Construction and Maintenance)
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including three in-school sessions of 8 weeks each.

Duties and skills
Lays out, assembles, installs, repairs, maintains, connects, or tests electrical fixtures, apparatus, control equipment, and wiring for systems of alarm, communication, light, heat, or power in buildings or other structures; plans proposed installations from blueprints, sketches, or specifications, or installs panel boards, switch boxes, pull boxes, and other related electrical devices.

Electrician (Domestic and Rural)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1800 hours, including three in-school sessions of 8 weeks each.

Duties and skills
Performs the work of an electrician in the construction, erection, repair, remodelling, or alteration of houses, multiple-dwelling buildings containing six or fewer dwellings, or buildings or structures used for farming; performs maintenance to electrical equipment in houses, multiple-dwelling buildings containing six or fewer dwellings, or farms.

General Carpenter
Educational requirements
Grade 10 or equivalent.

Length of program
3844 hours minimum, 7200 hours maximum, including two in-school sessions of 10 weeks each.

Duties and skills
Does the woodwork in the erection, alteration, or repair of structures; builds and erects forms for concrete; erects scaffolds, partitions; places door frames and window frames; lays floors; prepares walls and ceilings for plastering; installs interior fixtures and kitchen cupboards, and prepares and erects panels; lays out and erects stairs and handrails; fits and fixes hardware; fits doors, windows, and fixtures; weatherproofs outside walls.

Glazier and Metal Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours, including two in-school sessions of 7 weeks and one of 8 weeks.

Duties and skills
Performs layout, fabrication, assembly, and installation of extruded frames, hardware, store fronts, wall facings, manual sliding doors, window sashes, manual door closers, automatic door operators, and curtain walls; performs layout, fabrication, assembly, and installation of glass fronts, art glass, aquariums, and similar special products; cuts, fits, and installs glass in wood and metal frames for windows, skylights, store fronts, display cases, building fronts.

Ironworker
Educational requirements
Grade 10 or equivalent and 17 years of age.

Length of program
Three periods of 2000 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Field-fabricates, assembles, installs, handles, hoists, erects, dismantles, reconditions, adjusts, alters, repairs, or services all structural iron work, pre-cast and pre-stressed concrete, concrete reinforcing materials, ferrous and non-ferrous materials in curtain wall, ornamental and miscellaneous metal work, and all other materials used in lieu thereof.

Lather
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 10 weeks each.

Duties and skills
In the construction or repair of walls, partitions, ceilings, and arches in any structure: installs by tying, nailing, clipping, or welding wire, metal, or wood lath, plaster board, or other materials and accessories to serve as a base for plaster, cement, or acoustic material; erects plastic and light metal studs, frames, and accessories to receive plaster board and wire and metal lath.

Lineman
This trade comprises two branches:
Branch 1 – power lineman
Branch 2 – construction lineman

Educational requirements
Both branches:
Grade 10 or equivalent.

Length of program
Branch 1 – Power Lineman
Four periods of related training and work experience of 2000 hours each.

Branch 2 – Construction Lineman
Three periods of related training and work experience, one of 2500 hours and two of 2000 hours each.

Duties and skills
Branch 1 – Power Lineman
Operates, maintains, and services overhead and underground power lines used to conduct electricity from generating plants to consumers.

Branch 2 – Construction Lineman
Constructs or assembles a system of power lines used to conduct electricity from generating plants to consumers.

Painter
This trade comprises two branches:
Branch 1 – commercial/residential
Branch 2 – industrial

Educational requirements
Both branches
Grade 10 or equivalent.

Length of program
Branch 1 – Commercial/Residential
Three periods of related training and work experience of 1800 hours each.

Branch 2 – Industrial
Two periods of related training and work experience of 1800 hours each.

Duties and skills
Branch 1 – Commercial Residential
Prepares and performs interior and exterior work to plaster, wallboard, wood, metal, concrete masonry, stucco, and allied materials; prepares and works with steam wallpaper stripping machines, and applies wall coverings, wallpaper, grass cloth, wood veneer, vinyl fabrics, and allied materials.

Branch 2 – Industrial
Prepares and performs interior and exterior work to plaster, wallboard, wood, metal, concrete masonry, stucco, and allied materials; prepares and performs work by mechanical processes, blow torches, spray guns, and sandblasting.

Plasterer
Educational requirements
Grade 8 or equivalent.

Length of program
Four periods of 1600 hours.

Duties and skills
Applies plaster and stucco to the walls and ceilings, whether interior or exterior, of a structure; applies plaster and stucco on lath, masonry, and rigid insulation; tapes gypsum panels and wallboard.

Plumber
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Lays out, assembles, installs, maintains, or repairs in any structure, building, or site, piping, fixtures, and appurtenances for the supply of water for any domestic or industrial purpose or for the disposal of water after it has been used for a domestic or industrial purpose.

Refrigeration and Air-conditioning Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Installs or assembles any component of a refrigerating or air-conditioning system, assembles or connects any pipe or duct used in piping refrigerant or conditioned air; overhauls or repairs any equipment used in refrigerating or air-conditioning systems.

Sheet Metal Worker
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Manufactures, fabricates, assembles, handles, erects, installs, dismantles, reconditions, adjusts, alters, repairs, or services all ferrous and non-ferrous sheet metal work of No. 10 US gauge, or of any equivalent or lighter gauge, and all other materials used in lieu thereof.

Sprinkler and Fire Protection Installer
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1800 hours, including two in-school sessions of 7 weeks and one of 8 weeks.

Duties and skills
Lays out, assembles, installs, tests, and maintains high and low pressure pipeline systems for supplying water, air, foam, carbon dioxide, or other materials to or for fire protection systems.

Steamfitter
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Lays out, assembles, installs, maintains, or repairs any heating system, cooling system, process system, or industrial system; installs or connects piping in any building or structure; installs the piping for any process, including a process that conveys gas, or the tubing for any pneumatic or air-handling system.

• Construction Trades
Non-regulated

Draftsman (Architectural)
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 2000 hours each.

Duties and skills
Prepares drawings showing internal, external, or other architectural features of office blocks, residential structures, and industrial, commercial, and other buildings.

Drywall and Acoustic Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1500 hours each.

Duties and skills
Applies wallboard sheets to ceilings and interior walls of buildings; installs thermal acoustic insulation and sound absorption materials.

Terrazzo, Tile, and Marble Setter
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
Installs decorative surfacings composed of cement, sand, pigment or chemical compounds, marble, or other aggregates on floors, stairs, and other surfaces.

• Industrial Trades Regulated

Fitter (Structural Steel/Platework)
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including three in-school sessions of 8 weeks each.

Duties and skills
Reads and interprets blueprints; performs measuring, checking, and layout operations; assembles metal plates and sections, moves finished products using cranes, slings, or other lifting equipment.

General Machinist
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of at least 1500 hours (8000 hours maximum), including three in-school sessions of 8 weeks each.

Duties and skills
Sets up and operates various types of precision metal-cutting and grinding machines to close tolerances; has a broad understanding of metallurgy; is familiar with the use and care of precision measuring equipment; has a detailed knowledge of blueprint reading.

Industrial Mechanic (Millwright)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each, including three periods of in-school training of 8 weeks each.

Duties and skills
Installs, repairs, and maintains mechanical machines, their components, and related pneumatic and hydraulic systems in industrial plants or specific process areas; has a broad knowledge of metallurgy, welding, blueprint reading, and the use of precision measuring instruments.

Industrial Woodworker
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
Sets up and operates a variety of machinery used in the construction and fabrication of products manufactured from wood and related materials, such as cabinets, furniture, doors, and door frames.

Mould Maker
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each, including three in-school sessions of 8 weeks each.

Duties and skills
Makes, repairs, and modifies moulds, models, and templates, etc.; has a detailed knowledge of blueprint and drawing interpretation, plastics, and processing methods and equipment.

Printer
This trade comprises eight branches:
Branch 1 – letterpress (job shop)
Branch 2 – lithography (job shop)
Branch 3 – offset pressman (plant)
Branch 4 – linotype operator
Branch 5 – compositor
Branch 6 – pressman (letterpress)
Branch 7 – compositor (phototypesetting)
Branch 8 – compositor and camera technician

Educational requirements
All branches
Grade 10 or equivalent.

Length of program
Branches 1-7
Four periods of related training and work experience of 2000 hours each.

Branch 8
Four periods of related training and work experience of 2200 hours each.

Duties and skills
Branch 1 – Letterpress (Job Shop)
Operates printing presses, feed and delivery systems; mixes and matches ink; performs finishing processes in bindery; performs routine maintenance of equipment; handles paper, ink, and other supplies; composes type; produces, reads, and corrects proofs; makes up pages; uses photoengravings, electrotypes, and rubber and plastic plates.

Branch 2 – Lithography (Job Shop)
Operates and maintains lithographic process printing presses; performs bindery and other finishing operations; prepares photographic and plate-coating solutions; handles paper, ink, and chemicals; performs layout operations; composes type; reads, and marks proofs; performs camera copy reproduction; uses various types of cameras, filters; develops film; produces various types of plate.

Branch 3 – Offset Pressman (Plant)
Operates press; installs plate, checks registration; removes and cleans plate and cylinders at end of run.

Branch 4 – Linotype Operator
Operates keyboard-controlled typecasting machine to cast in metal lines of type.

Branch 5 – Compositor
Sets type by hand or machine, and assembles type and cuts in galleys; determines type size, style, and layout from worksheet; cleans type after use, and sorts and stores letters and spacers; may operate proof press to take proofs.

Branch 6 – Pressman (Letterpress)
Performs routine maintenance of equipment; sets up letterpress printing press and colour position; mixes special colour inks; inspects and handles paper rolls; operates main level of press.

Branch 7 – Compositor (Phototypesetting)
Understands hot, cold, and non-metallic composition and colour printing; operates various types of printing presses and binding equipment; handles paper and other printing stock; does advertising artwork and layout; designs business forms; composes advertising, forms, and books; lays out pages in correct order for press; performs colour separations.

Branch 8 – Compositor and Camera Technician
Performs routine maintenance of equipment; prepares photographic solutions, and files negatives, chemicals, and supplies; uses phototypesetting, hand lettering, and transfer lettering in layouts and page and display composition; uses mechanical colour, register systems; uses various types of cameras; selects proper film and colour-proofing materials for use in contact printing; processes film.

Tool and Die Maker
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each, including three in-school sessions of 8 weeks each.

Duties and skills
Makes, repairs, and modifies dies, forms, cutting tools, gauges, jigs, and fixtures; works to close tolerances; has a detailed knowledge of blueprint reading and interpretation; should have a broad understanding of metallurgy and a working knowledge of the use, care, and operation of machine tools and related equipment.

• Industrial Trades
Non-regulated

Carpenter (Plant)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1800 hours each.

Duties and skills
In an industrial plant or industrial processing area: cuts, shapes, assembles, erects, and maintains various types of wood structures and fittings, using hand and power tools; makes, alters, and repairs structural woodwork and objects.

Chemical Plant Operator
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 2000 hours each.

Duties and skills
Operates control panels which control distillation trains, chemical reactors, pumps, compressors, and heat exchangers; operates and controls filters, blenders, steam, electric, and gas heating devices, decanters, mixers, dryers, pumps, compressors, vacuum jets and pumps, conveyors, fans, and blowers; fills containers, tank cars, tank trucks, and storage tanks.

Draftsman (Mechanical)
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 2000 hours each.

Duties and skills
Prepares working plans and other technical drawings from sketches or notes for machines, engines, jigs and fixtures, mechanical equipment, and various types of products for engineering, manufacturing, illustrative, and other purposes.

Electrician (Plant Maintenance)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
In an industrial plant: installs conduit, junction boxes, and switches; pulls, insulates, and seals cables; installs, aligns, hooks up, and tests machines; installs lighting, control, communications, and heating systems; overhauls and repairs AC and DC motors and generators.

Electronics Mechanic (Industrial Control)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
Installs, tests, calibrates, and repairs electronic control, monitoring, and communications equipment in an industrial plant.

Oil-burner Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Two periods of 1800 hours each.

Duties and skills
Installs, cleans, repairs, overhauls, adjusts, and removes oil burner installations, and is licensed in accordance with the regulations of the Ontario Ministry of Consumer and Commercial Relations, Technical Standards Division, Fuels Safety Branch.

Sheet Metal Worker (Plant)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
In an industrial plant: fabricates, installs, or repairs sheet metal products used for plant maintenance, dust collection, ventilation systems, and plant processes.

Welder (Arc and Gas)
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours each.

Duties and skills
Welds metal parts together, according to layouts, blueprints, or work orders, using both gas welding and any combination of arc welding processes such as manual, automatic and semi-automatic, inert gas, and submerged arc; may perform flame-cutting and grinding.

Other information
To weld on boilers, pressure vessels, and pressure piping, it is necessary to pass Qualification Tests specified by the Ontario Ministry of Consumer and Commercial Relations, Technical Standards Division, Pressure Vessels Safety Branch.

• Motive Power Trades
Regulated

Air-cooled and Marine Engine Mechanic
This trade comprises four branches:
Branch 1 – small engine mechanic
Branch 2 – marina and small powered equipment mechanic
Branch 3 – small engine mechanic (construction)
Branch 4 – boat motor mechanic

Educational requirements
All branches
Grade 10 or equivalent.

Length of program
Branches 1-3
Two periods of 2000 hours each, including two in-school sessions of 10 weeks each.

Branch 4
Four periods of 1800 hours each, including two in-school sessions of 10 weeks each.

Duties and skills
Branch 1 – Small Engine Mechanic
Repairs small air-cooled gasoline and diesel engines used to power lawnmowers, snowblowers, chainsaws, garden tractors, snowmobiles, portable pumps, and generator sets, as well as air- or water-cooled outboard motors.

Branch 2 – Marina and Small Powered Equipment Mechanic
Tests and inspects, locates faults in, maintains, repairs, overhauls, and prepares for storage small air-cooled gasoline and diesel engines used to power motor boats and small powered equipment.

Branch 3 – Small Engine Mechanic (Construction)
Repairs small air- and water-cooled internal combustion engines used to power construction tools and equipment: chainsaws, small tractors, portable pumps, air compressors, and generator sets.

Branch 4 – Boat Motor Mechanic
Installs, repairs, adjusts, overhauls, or converts gasoline and diesel boat motors, clutches, gearboxes and reduction gears, shafts, propellers, steering gear, controls, instruments, and fuel, ignition, electrical, cooling, and exhaust systems.

Alignment and Brakes Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 8 weeks each.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles front and rear suspension systems and brake system components, including such items as wheels, tires, springs, and shock absorbers; inspects frame alignment and realigns as necessary.

Auto Body Repairer
Educational requirements
Grade 8 or equivalent.

Length of program
Four periods of 1800 hours, including one in-school session of 8 weeks and one of 7 weeks.

Duties and skills
Hammers out dents in body panels, fenders, and skirting; files, grinds, sands, fills, and finishes ready for priming any dented or pierced area; uses heat to shrink or stretch metal panels; welds breaks in body areas; tests for and corrects faulty alignment of frames.

Automotive Machinist
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1800 hours, including one in-school session of 8 weeks and two of 7 weeks.

Duties and skills
Reconditions and rebuilds internal combustion engines and associated components; reconditions power trains and brake and suspension system components.

Automotive Painter
Educational requirements
Grade 8 or equivalent.

Length of program
Two periods of 1800 hours, including one in-school session of 8 weeks.

Duties and skills
Sands, fills, primes, and applies finishing paint; dries and bakes newly painted surfaces; mixes paints and ingredients and matches colours; refinishes galvanized outer panels and anodized aluminum mouldings.

Farm Equipment Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 14 weeks and two of 8 weeks.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles all components of farm machinery, including steering mechanisms, brakes, engines, power trains, and suspension, air conditioning, fuel, and electrical systems.

Fuel and Electrical Systems Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 8 weeks each.

Duties and skills
Diagnoses faults in, disassembles, adjusts, services, repairs, and assembles components of motor vehicles, including electrical, fuel, ignition, and air conditioning systems; performs minor and major engine tune-ups.

Heavy Duty Equipment Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including one in-school session of 12 weeks and two of 7 weeks.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles all components of heavy duty equipment, including steering mechanisms, brakes, engines, power trains, and suspension, fuel, and electrical systems.

Motorcycle Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 8 weeks each.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, and overhauls all components of motorcycles, including forks, frames, brakes, engines, power trains, and suspension, fuel, and electrical systems.

Motor Vehicle Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Five periods of 1800 hours, including three in-school sessions of 8 weeks each.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles all components of motor vehicles, including steering mechanisms, brakes, engines, power trains, and suspension, air conditioning, fuel, and electrical systems.

An alternative program to this is the three-year motor vehicle mechanic apprenticeship program. Under this program, the apprentice attends a 40-week in-school program immediately after being registered and before going on to the on-the-job phase of training. This program is divided into five periods, the first being 1600 hours; the second, 768 hours; and each subsequent period, 1184 hours. The apprentice receives a training allowance for the first period while at school. This is a popular program since jobs are found for the apprentices, but enrolment is limited.

Service Station Attendant
Educational requirements
Grade 8 or equivalent.

Length of program
Two periods of 1800 hours, including one in-school session of 8 weeks.

Duties and skills
Lubricates vehicles; maintains cooling systems, batteries, lights, horns, miscellaneous circuits, spark plugs, belts, and hydraulic levels; replaces complete exhaust systems or parts; repairs tires and tubes, and balances wheels.

Transmission Mechanic
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 8 weeks each.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles all motor vehicle transmissions, both automatic and standard, and drive shafts; is familiar with the effects of other components of motor vehicles on the operation of transmissions and drive shafts.

Truck-Trailer Repairer
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 1800 hours, including two in-school sessions of 8 weeks each.

Duties and skills
Inspects, diagnoses faults in, disassembles, adjusts, services, repairs, overhauls, and assembles all components of truck trailers, including suspension systems, frames, brakes, and electrical and air conditioning systems.

• Service Trades Regulated

Baker
This trade comprises three branches:
Branch 1 – junior baker
Branch 2 – baker
Branch 3 – patissier

Educational requirements
All branches
Grade 8 or equivalent.

Length of program
Branch 1 – Junior Baker
One period of 2000 hours, including one in-school session of 15 weeks.

Branch 2 – Baker
Three periods of 2000 hours, including two in-school sessions of 15 weeks each.

Branch 3 – Patissier
Four periods of 2000 hours, including two in-school sessions of 15 weeks and one session of 5 weeks.

Duties and skills
Branch 1 – Junior Baker
Prepares ingredients, straight dough, different types of fermented goods, pies, sweet and puff paste goods, cookies, muffins, tea biscuits, and doughnuts; assists in bakery formulation and fermentation processes.

Branch 2 – Baker
Supervises bakery formulation, fermentation, stock control, receiving and issuing, product costing, and ingredient and material purchasing; prepares puddings and desserts, pastry and choux paste, bread and rolls, icings and fillings, and cakes and creams.

Branch 3 – Patissier
Prepares specialty cakes, pastries, petits fours, chocolate and couverture specialty cookies, wedding cakes, decoration of desserts, and preparation of desserts, almond paste, and gum paste.

Cook
This trade comprises two branches:
Branch 1 – assistant cook
Branch 2 – cook

Educational requirements
Both branches
Grade 10 or equivalent.

Length of program
Branch 1 – Assistant Cook
One period of 2000 hours, including one in-school session of 15 weeks.

Branch 2 – Cook
Three periods of 2000 hours, including two in-school sessions of 15 weeks each.

Duties and skills
Branch 1 – Assistant Cook
Prepares and assembles complete breakfasts, short order grills, sandwiches, simple salads, simple desserts, vegetables, and non-alcoholic beverages; carves cooked meats, poultry, and game; has a working knowledge of table service, soups and sauces.

Branch 2 – Cook
Prepares and assembles complete meals, short order grills, sandwiches, vegetables, hot and cold buffets, salads and dressings, desserts, and non-alcoholic beverages; carves cooked meats, poultry, fish, and game; has a working knowledge of table service; has a knowledge of stock control, menu planning, and food costing and purchasing.

Dry Cleaner
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 900 hours each, including a correspondence course for related in-school training.

Duties and skills
Operates machines to dry clean, with chemical solutions, clothing, textile furnishings, and similar articles.

Hairstylist
This trade comprises three branches:
Branch 1 – barber
Branch 2 – hairdresser
Branch 3 – hairstylist

Educational requirements
All branches
Grade 9 or equivalent.

Length of program
Branches 1 and 2 – Barber and Hairdresser
Three periods of 1500 hours per period, including two in-school sessions of 8 weeks each.

Branch 3 – Hairstylist
Three periods of 1580 hours per period, including three in-school sessions of 8 weeks each.

Duties and skills
All branches
Tints, bleaches, or dyes hair; shampoos hair and scalp; gives hair and scalp treatments; cuts and trims hair; curls or waves hair by any means; combs or brushes hair; shapes, colours, or treats eyebrows or eyelashes; in addition, Branch 1, barber, shaves or trims beards or moustaches; Branch 2, hairdresser, gives facials and manicures and applies make-up; Branch 3, hairstylist, performs all of the above.

Other information
A person may also become a barber, hairdresser, and/or hairstylist by registering with a licensed private school and paying the tuition fee. A list of schools in Ontario is available from the Skills Development Division, Operations Branch.

Radio and TV Service Technician
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 2000 hours, including two in-school sessions of 18 weeks each.

Duties and skills
Installs, adjusts, and repairs radio and television receivers and other domestic electronic equipment. *Does not include* the manufacture of radio, television, amplifier, or other related electronic equipment; and does not necessarily include the repair and maintenance of such equipment in an industrial plant, nor the wiring of such equipment to an external power source.

• Services Trades Non-regulated

Butcher
Educational requirements
Grade 10 or equivalent.

Length of program
Four periods of 1800 hours each.

Duties and skills
Carries out slaughtering, skinning, cleaning, and hanging operations, bones and trims various types of meat carcasses – i.e., beef, veal, lamb, and pork – into marketable retail cuts; may make various kinds of sausages and prepare special meats and fancy meat products.

Furrier
Educational requirements
Grade 10 or equivalent.

Length of program
Three periods of 2000 hours each.

Duties and skills
Makes, alters, restyles, and repairs fur garments; estimates cost of new garments, alterations, renovations, and repairs.

Horticulturist
This trade comprises two branches:
Branch 1 – Nursery, Garden Centre, and Greenhouse Worker
Branch 2 – Groundskeeper, Greenskeeper, and Landscaper

Educational requirements
Both branches
Grade 10 or equivalent.

Length of program
Both branches
Three periods of 1500 hours each, including three in-school sessions of 8 weeks each.

Duties and skills
Branch 1 – Nursery, Garden Centre, and Greenhouse Worker
Plants, cultivates, and harvests trees, shrubs, and ornamental and flowering plants; plants, transplants, and sells related horticultural products.

Branch 2 – Groundskeeper, Greenskeeper, and Landscaper
Prepares sites by excavating, hauling, and spreading soils and aggregates; develops and maintains turf and fine turf by fertilizing, seeding, sodding, regrading, and irrigating; plants trees, shrubs, flowers, and bulbs; maintains flowers, shrubs, trees, and all other related plant materials.

Retail Meat Cutter
Educational requirements
Grade 10 or equivalent.

Length of program
Two periods of 2000 hours each, including one in-school session of 18 weeks.

Duties and skills
Bones and trims various types of meat carcasses – i.e., veal, beef, lamb, and pork – into marketable retail cuts; may make various types of sausages and prepare special meats and fancy meat products; may also carry out poultry and fish preparation.

• Miscellaneous Non-regulated Trades

There are training programs for over 200 non-regulated trades in Ontario. Some of the more popular ones are listed here, along with the number of training hours involved in each. Graduate apprentices are awarded Certificates of Apprenticeship as evidence of having attained the journeyman level of knowledge and skill.

New apprenticeship training programs can be developed on request. The programs are usually custom-designed to meet the exact requirements of particular jobs and employers.

Auto Upholsterer
Three periods of 1800 hours each.

Electro-Plater
Four periods of 1800 hours each.

Foundryman (Coremaker)
Two periods of 2000 hours each.

Foundryman (Moulder)
Four periods of 2000 hours each.

Ironworker (Plant)
Three periods of 2000 hours each.

Jockey
Three periods of 1800 hours each.

Optics Technician
(Lens and Prism Maker)
Four periods of 2000 hours each.

Pipefitter (Industrial)
Three periods of 2000 hours each.

Plastics Technician
Three periods of 2000 hours each.

Plumber (Plant)
Four periods of 2000 hours each.

Ship Builder (Joiner)
Four periods of 2000 hours each.

Ship Builder (Ship Plater)
Four periods of 2000 hours each.

Steel Mill Worker (Blast Furnace)
Four periods of 2000 hours each.

Steel Mill Worker (Rolling Mill)
Four periods of 2000 hours each.

Upholsterer (Furniture)
Four periods of 2000 hours each.

• Operations Branch Offices

For more information, please contact a training consultant at the Operations Branch office nearest you.

Barrie	(705) 737-1431
Belleville	(613) 968-5558
Bracebridge	(705) 645-8643
Brantford	(519) 756-5197
Brockville	(613) 342-5481
Chatham	(519) 354-9100
Cornwall	(613) 938-9702
Hamilton	(416) 521-7764
Kenora	(807) 468-3325
Kingston	(613) 547-2271
London	(519) 453-7190
North Bay	(705) 474-5546
Oakville	(416) 842-2454
Oshawa	(416) 576-0171
Ottawa	(613) 731-7100
Owen Sound	(519) 376-5790
Pembroke	(613) 735-3911
Peterborough	(705) 743-4172
St. Catharines	(416) 684-8543
Sarnia	(519) 542-7705
Sault Ste. Marie	(705) 942-4420
Sudbury	(705) 675-4481
Thunder Bay	(807) 475-1605
Timmins	(705) 264-2354
Toronto Central	(416) 965-4211
Toronto East	(416) 750-3533
Toronto West	(416) 233-3281
Waterloo	(519) 884-5460
Windsor	(519) 254-8654

Toll-free calling may be available from your area; look under *Government-Ontario* in your telephone book.

Occupational Health and Safety
Information about the Occupational Health and Safety Act, 1978, and related matters is available from the Ministry of Labour and the faculties of universities and community colleges throughout Ontario. Occupational Health and Safety Resource Centres are operated by Queen's University, Lakehead University, University of Waterloo, and The University of Western Ontario.

Women in skilled trades

YES I CAN!
This short documentary film about successful women apprentices and journeymen helps dispel the male mystique that too often surrounds certain trades. With cheerful good humour, the subjects describe the joys and frustrations of working at traditionally "male" occupations. For more information, telephone (416) 965-4203.

General Information on Ontario Universities

Admission to Bachelor and First Professional Programs at University
Universities generally require an average of 60% or better in the subjects counted toward the Ontario Secondary School Honour Graduation Diploma (Grade 13). Students should be aware, however, that possession of the minimum admission requirements does not guarantee admission. Also, applicants with good standing are more readily accepted than students with a borderline standing and, for certain programs with limited enrolment, an average of 70% to 80% or more may be required.

Course Prerequisites
Specific Grade 13 subject requirements vary according to the university and area of study selected. These are listed for each university under the appropriate degree program but, as the admissions information has been confirmed only for the current year, students are advised to check with their guidance counsellors about any possible changes in subject requirements affecting the 1983-84 academic year.

Course Listings
All programs offered are listed under one of nine appropriate subject area headings. For example, a Bachelor of Arts program in music would be listed under the Fine and Applied Arts heading, while a Bachelor of Arts program in business would be listed under the Social Sciences and Related Courses heading.

In the example given below, the Bachelor of Arts program in mathematics and the Bachelor of Science programs in computer science, mathematics, and physics are listed under the Mathematical and Physical Sciences heading. As a Bachelor of Arts program, mathematics is offered only at the four-year honours level; as a Bachelor of Science program, however, it is offered at both the three- and four-year levels. Computer science and physics, also offered as three-year and four-year level Bachelor of Science programs, are not available as Bachelor of Arts programs.

To be eligible for admission to the Bachelor of Arts program in mathematics, applicants must meet the university's general admission requirements and the requirements for a Bachelor of Arts program. For admission to Bachelor of Science programs, applicants must meet the university's general admission requirements as well as the requirements for a Bachelor of Science program.

Mathematical and Physical Sciences

• Bachelor of Arts

Four-year honours
Available in: mathematics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general/four-year honours
Available in: computer science, mathematics, physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Early Acceptance
Early acceptance to university may be offered to students before the end of the school year on the basis of their interim Grade 13 marks, Grade 12 and Grade 11 marks, and their principal's recommendation, on condition that they maintain their standing and complete their year successfully.

Application to Enter an Ontario University
How to apply
A student planning to enrol in any year at an Ontario university in 1983 will submit an application through the
Ontario Universities' Application Centre
P.O. Box 1328
Guelph, Ontario N1H 7P4
Telephone (519) 823-1940

The Centre receives and records applications and student responses to university offers of admission.

Secondary school applicants
These applicants are currently enrolled in full-time Ontario Grade 13 programs in accredited secondary or private schools.

The Centre sends blank application forms (OUAC 101) and fee envelopes (OUAC 106) to each secondary and private school in Ontario.

Each applicant should complete the personal data on the form and send copy number 3 along with the $9 application service fee to the application centre in the envelope provided. The applicant then selects and records up to three combina-

tions of universities and programs and gives the completed form to the principal.

The principal records Grades 11, 12 and 13 course data on the applicant's form and forwards the completed form to the Centre where it is processed and forwarded to the appropriate universities. The Centre acknowledges receipt of each application by forwarding an Acknowledgement/ Amendment Form (OUAC 107) to the appropriate secondary school.

The Centre also obtains the recommended interim Grade 13 marks direct from the secondary school concerned.

Other applicants

These applicants (including adults) are not currently enrolled in Ontario secondary schools, but may be applicants who have previously obtained Grade 13, applicants from correspondence or night schools, and applicants from other provinces or countries.

Other applicants may obtain an Application Form (OUAC 105) from any university. Application forms should be completed and submitted to the Ontario Universities' Application Centre along with the application fee of $9. An applicant may, when applying, choose a maximum of three combinations of university and program. The Centre processes the application and forwards it to the appropriate universities. The applicant must arrange to have supporting academic documents forwarded direct to these universities quoting the application form number.

Amendment process

If applicants receive refusals of admission from the universities they have selected, they may add new choices and have their applications forwarded by the Centre to the new universities for adjudication.

University decision concerning the applicant

The university, when it makes an offer of admission to the applicant, includes a response document which the applicant must complete and return to the Centre. The applicant cannot accept more than one offer of admission. The Centre then processes the response and notifies the one university of acceptance and the other universities of the refusal of their offers.

Schedule of Important Dates
1983-84

August 31, 1983
"Other" (OUAC 105) application forms distributed to universities.

October 15, 1983
Commence distribution of OUAC 101 application material to secondary schools.

December 23, 1983
Date for receipt of (OUAC 101) application forms from the secondary schools.

January 9, 1984
Commence distribution of (OUAC 107) Acknowledgement/Amendment forms to secondary schools.

February 14, 1984
Commence distribution of (OUAC 102) Grades for Early Admission forms to secondary schools SSHGD students and for Grade 12 students.

March 7, 1984
Commence distribution of (OUAC 102) Grades for Early Admission forms to secondary schools for Grade 13 students.

April 20, 1984
Last date by which the Application Centre can receive interim marks from the secondary schools so that candidates may be considered for early admission.

June 15, 1984
The earliest date by which the candidate may receive offers of early admission, scholarships and places in residence.

June 29, 1984
Earliest date that universities may require a response to an offer of early admission.

Preliminary Year and Admission from Grade 12

(Procedure is the same as described for full-time Ontario Grade 13 students.)

Four universities – Carleton, Ottawa, Windsor and Brescia College (an affiliate of Western) – offer a preliminary year in lieu of Grade 13 for highly qualified Grade 12 students. At the University of Ottawa, this is available only in the science and engineering faculty. Grade 12 students who achieve a minimum overall average of 80% on their final marks are eligible to apply to the first year of Ottawa's Faculty of Administration, Faculty of Arts and

Faculty of Social Sciences. A similar program of admission from Grade 12 to the first year of a degree program is offered at Lakehead, Laurentian, and McMaster universities, while the University of Guelph admits a number of Grade 13 students from semestered secondary schools directly into the first semester of a degree program in January.

Brock University offers admission into first year to exceptional students, recommended by their schools, who have completed Grade 12 and Brock's special summer course. Wilfrid Laurier University's Grade 12 Scholarship Program offers a limited number of Ontario secondary school students the opportunity to enter the first year of a university degree program after successfully completing two summer session credit courses at the university.

Mature or Non-matriculant Students
The admission requirements for mature or non-matriculant students vary widely. Most universities impose an age minimum of either 21 or 23 years. Some universities require students to have been away from formal education for a period of time and some prescribe pre-university course work or special admission tests. In general, mature applicants are expected to have at least adequate standing in the academic work they have undertaken previously and to be able to demonstrate that they have the aptitude for work at the university level. At many universities, places in full-time programs are filled by early July, therefore, students who are seriously interested in full-time study and are planning to apply as mature or non-matriculant applicants should apply early.

Graduate, Extension and Summer Programs
Horizons does not include information on the variety of graduate, extension and summer programs offered at the university level. Graduate programs normally require honours standing in a four-year undergraduate program as a prerequisite. In general, admission requirements for part-time, extension and summer programs leading to degrees or diplomas are the same as for full-time degree programs. Non-credit courses for students not working toward a degree are also available. For further information, check with the admissions office, the extension department, or the graduate school of the university concerned.

Secondary School Liaison and University Information Programs
During the academic year, representatives from each of the 15 universities in Ontario, Ryerson Polytechnical Institute and the Royal Military College visit over 100 secondary schools across Ontario to take part in university information sessions for students, parents and guidance counsellors, as arranged by local and county boards of education. The purpose of these programs is to provide firsthand information about university admission requirements, programs of study, campus life, facilities, campus tours and scholarships. The names and addresses of Secondary School Liaison Officers are given in the university sections of *Horizons*. Inquiries are welcome.

Occupational Health and Safety
Occupational Health and Safety Resource Centres are operated by Queen's University, Lakehead University, University of Waterloo, The University of Western Ontario, and the Ontario Ministry of Labour.

Programs available at Ontario universities

Note:
The following chart is a listing of programs offered at the 16 universities in Ontario. *This is not a comprehensive list.* For information on special programs see the individual university entries on pages 84-132.
A separate listing of programs offered at the Ryerson Polytechnical Institute follows this chart. For information about programs offered at the Ontario College of Art see page 141.

Codes:
● = undergraduate degree program
+ = undergraduate diploma program
■ = undergraduate degree and diploma programs
□ = undergraduate and graduate programs
G = graduate study only
M = minor specialization only
† = check with university for details

Universities	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queen's	Royal Military College	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York
40. Agricultural and Biological Sciences																
40.00 Agriculture																
40.01 Agricultural Biology, Business, Mechanization			□													
40.02 Agriculture			□													
40.03 Horticulture			□													
41.00 Biology																
41.01 Biochemistry	□	●	□		●	□	□	□		□	●	┐	□		●	M
41.02 Biology, Biological Sciences	□	□	□	□	□	□	□	□		●	□	□	●	●	□	□
41.03 Biophysics	●		□			G				□			□		●	
41.04 Botany (Plant Sciences)	□	□	□		□			†		□	●	M	□		G	M
41.05 Ecology and Evolution							†						●			
41.06 Genetics			●										●			
41.07 Zoology	□	□	□		□			†		□	●	M	□		M	M
42.00 Biological Sciences: Other																
42.01 Fish and Wildlife Biology			□													
42.02 Human Biology			●													
42.03 Marine Biology, Sciences			□													
42.04 Microbiology, Immunology	M	●	□	●			G	†		□		M	□		G	
42.05 Nutrition and Food Sciences			□				●			□			●		M	
42.06 Toxicology			●							□			●			
42.07 Veterinary Medicine			□													
43. Education/Physical Education/Recreation																
43.00 Education																
43.01 Art Education				†				†		●	†		●		M	●
43.02 Arts and Science in Teaching						G										
43.03 Education	†			□	●		□	□		□	●		□		□	■
43.04 Elementary Education	†			□	■		●	†		●	●		●		●	■
43.05 Secondary Education	†			□			●	†		●	●	†	●		●	■
43.06 Special Education, Exceptional Children	M			M			†	†		M	†		†		G	□
44.00 Physical Education and Recreation																
44.01 Health, Health Studies				●		G		†		●		□				
44.02 Kinesiology			□				□			M		□			●	M
44.03 Physical Education, Physical and Health Education	●			□	●	□	□	□		●			□	M	□	□
44.04 Recreation	●			●			●			●		□				M
45. Engineering and Applied Sciences																
45.00 Applied Sciences																
45.01 Applied Mathematics	M	●	□	□		□	●	●		□		□	□		●	●
45.02 Applied Science			●	†				□	●	□					□	
45.03 Architecture		●								□		●				
45.04 Earth Science			□		●		●			□		□				●
45.05 Forestry, Forest Technology				□						□						
45.06 Geological and Applied Earth Science								□		□		□				●
45.07 Industrial Design		●														
45.08 Landscape Architecture			□							●						
46.00 Engineering																
46.01 Aeronautical Engineering		G								□						
46.02 Agricultural Engineering			□													
46.03 Biological Engineering			□													
46.04 Ceramic Engineering						□				M						

Note:
The following chart is a listing of programs offered at the 16 universities in Ontario. *This is not a comprehensive list.* For information on special programs see the individual university entries on pages 84-132.
A separate listing of programs offered at the Ryerson Polytechnical Institute follows this chart. For information about programs offered at the Ontario College of Art see page 141.

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	Universities	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queen's	Royal Military College	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York
	Engineering continued																
	46.05 Chemical Engineering				■	†	□	□	□	G	□		□	□		□	
	46.06 Chemical Engineering, Nuclear Option										□						
	46.07 Civil Engineering		□		■	†	□	□	□	□	□		□	□		□	
	46.08 Computer Engineering		●				□	M	†	□							
	46.09 Electrical Engineering		□		■		□	□	□	□	□		□	□		□	
	46.10 Engineering		□	□	■	†	†		□		□		□	G		□	
	46.11 Engineering Chemistry								●								
	46.12 Engineering Physics				■		□		●	□	□						
	46.13 Fuels and Materials Engineering		G							●				□			
	46.14 Geological Engineering								●		□		●			□	
	46.15 Industrial Engineering									●	□					□	
	46.16 Management Engineering						●	●			□		G				
	46.17 Manufacturing Engineering						●										
	46.18 Mechanical Engineering		□		■	†	□	□	□	□	□		□	□		□	
	46.19 Metallurgical Engineering					●	□		□		□					□	
	46.20 Mining Engineering					●			□		M						
	46.21 Nuclear Engineering						G			G	□						
	46.22 Systems Design		□								□		□				
	46.23 Water Resources Engineering			□													
47. Fine and Applied Arts	**47.00 Art, Fine Arts, Theatre**																
	47.01 Art Conservation								G								
	47.02 Art, Fine Arts	●		●	●		●	●	●		□	M	●	●	●	□	□
	47.03 Art History		●	●	†		●	●	□		□		●	●	●	●	□
	47.04 Dance				†		M						●	M		M	□
	47.05 Drama, Dramatic Art	●		●	†	●	●		●		□	M	●	●		●	□
	47.06 Film, Cinema	●	●			M	M		●		●	M	●	●	M	M	□
	47.07 Medical Illustration										●						
	47.08 Painting				†											M	□
	47.09 Studio Art			●	†		●	●	●		●	M	●	●		●	□
	47.10 Theatre, Theatre Arts	●			†	●		●				M	●			●	□
	48.00 Music																
	48.01 Music	●	■	●	●	●	●	●	●		□		●	□	●	●	□
	48.02 Music Education						●	●	†		□			□	●	●	●
	48.03 Music History, Literature	●	●		+		●	●	●		□			□	●	●	●
	48.04 Music Performance, Applied Music	●			†		●	●	●		□			□	●	●	●
	48.05 Music Theory, Composition	●	●		†		●	●	●		□			□	●	●	●
49. General Arts and Science	**49.00 General Arts and Science**																
	49.01 General Arts	●	●	●	●		●	●	●			●	●	●	●	●	□
	49.02 General Arts and Science						●					●					
	49.03 General Science	●	●	●	●	●	●	●	●			●	●	●	●	●	□
50. Health Professions and Medical Sciences	**50.00 Health Professions and Medical Sciences**																
	50.01 Anatomy						G	G	†		G			G		G	
	50.02 Communicative Disorders													□			
	50.03 Dental Surgery										□						
	50.04 Dentistry										□			□			
	50.05 Medicine						□	□	□		□			□			
	50.06 Nursing				●	●	●	●	●		□			□		■	
	50.07 Nursing Education													G		M	
	50.08 Occupational Therapy, Physical Therapy, Physiotherapy						●		●		●			□			
	50.09 Optometry												□				
	50.10 Pharmacology							G	†		□			□			

Note:
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Universities	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queen's	Royal Military College	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York
Health Professions and Medical Sciences continued																
50.11 Pharmacy										□						
50.12 Physiology	□	□					G	†		□		G	□			
51. Humanities and Related Courses **51.00 Languages and Literature**																
51.01 Chinese										□					M	M
51.02 Classics	●	□	●	M	M	□	□	□		□	●	●	□	●	●	●
51.03 Communication Arts		†					●							●	□	
51.04 Comparative Literature		G				M					M				●	
51.05 English Language and Literature	●	□	□	□	□	□	□	□	□	□	●	□	□	●	□	□
51.06 French Language and Literature	●	□	●	●	□	□	□	□		□	●	□	□	□	□	●
51.07 German Language and Literature	●	□	●	M	●	□	●	□		□	●	□	□	●	●	●
51.08 Greek Language and Literature	●	□	●	M	M	□	†	●		□	●	●	□	●	●	●
51.09 Italian Language and Literature	●	●	●	M	●	●	●	●		□		M	●		●	●
51.10 Journalism		□											G		M	
51.11 Latin Language and Literature	●	□	●	M	M	□	†	●		□	●	●	□	●	●	●
51.12 Linguistics, Applied Linguistics		●	●	M	●	M	□	●		□	M		●		●	●
51.13 Mass Communications		●														●
51.14 Organizational Communications															M	
51.15 Russian Language and Literature	●	●		M	●	●	□	●		□		□	●		●	●
51.16 Slavic Language and Literature						●										
51.17 Spanish Language and Literature	●	□	●	M	●	●	●	□		□	●	●	□	□	□	●
51.18 Translation, Interpretation		+			●		□	●		G		●			M	●
52.00 Philosophy and Religious Studies																
52.01 Philosophy	□	□	□	●	●	□	□	□		□	●	□	□	●	□	□
52.02 Religion, Religious Studies	●	□		M	●	□	□	●		□	†	●	●	□	□	●
52.03 Theology, Theological Studies						G	□	†		□			□	G		
53.00 Independent Studies																
53.01 Independent Studies, Experimental Programs		●									●	●				●
54. Mathematical and Physical Sciences **54.00 Mathematics**																
54.01 Actuarial Science				●						●		●	●		M	†
54.02 Combinatorics and Optimization							†					□				
54.03 Computer Science	●	●	●	□	●	□	●	□		□	†	□	□	●	●	●
54.04 Mathematics	●	□	□	□	●	□	□	□	G	□	●	□	□	●	□	□
54.05 Mathematics and Physics	●	●		●		●		●	●	●	●	●	●		●	●
54.06 Mathematics/CA/RIA/Business Administration Options												●				†
54.07 Mathematics/Teaching Option												●	●			
54.08 Operations Research							●			+		●				+
54.09 Pure Mathematics		●				□	●				●	□	●			
54.10 Statistics	M	□	□			□	●	●		□	M	□	□		M	M
55.00 Physics																
55.01 Astronomy					M	M		†		□			□			G
55.02 Chemical Physics	M		□			G		●		□	●	□	□			G
55.03 Geophysics, Space Physics, Astrophysics		●						●		□		●	□		M	G
55.04 Mathematical Physics	●	●	□	●		M		●		□						M
55.05 Physics	□	□	□	□	□	□	□	□	G	□	□	□	□	●	□	□
56.00 Physical Sciences: Other																
56.01 Chemistry	□	□	□	□	□	□	□	□	G	□	□	□	□	●	□	□
56.02 Climatology										G					●	
56.03 Fuel and Energy Science				M						G						
56.04 Geology	□	□	M	□	□	□	□	□		□		□	□		□	M

Note:
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	Physical Sciences: Other continued																
	56.05 Materials Science		G				□			G	□			□			
	56.06 Metallurgy						□				□					M	
	56.07 Survey Science										●						
57. Social Sciences and Related Courses	**57.00 Business, Commerce, Economics**																
	57.01 Accounting, Accountancy	●	M		●		M	●	†		●	M	●	□	●	□	□
	57.02 Administration, Administrative Studies	●			●		M	□	†		●	●	●	●	●	□	□
	57.03 Administrative and Office Management Studies													●			
	57.04 Business, Business Administration	●		M	□	G	□	□	□		G	●		□	□	□	□
	57.05 Business Economics	●		●			●		†					G		●	□
	57.06 Commerce		●	●	●	●	●	●	●	●	●			□	□	□	M
	57.07 Economics	●	□	□	□	●	□	□	□	●	□	●	□	□	●	□	□
	57.08 Finance	●	M				M	M	†		●			□	●	□	□
	57.09 Gerontology												†				
	57.10 Hotel and Food Administration			●													
	57.11 Industrial, Labour Relations	M	M		●		M	†	†		G			□		M	□
	57.12 Management, Management Sciences, Business Management	●		●			G	□	†		G	†	□	□		□	□
	57.13 Marketing	●	M		●		M	M	†			M		□	●	□	□
	57.14 Personnel and Administrative Studies	●			●						+		†	□			
	57.15 Public Administration	●	□			+	M	M	G		+	●	●	■		■	□
	57.16 Resource Management		●					M								●	
	58.00 Canadian and International Studies																
	58.01 African Studies		M								●						●
	58.02 Asian Studies	●	M				M				□		M		●		●
	58.03 Canadian Studies	●	□	●	●	●	●		●		●	●	M	M	●	M	●
	58.04 Chinese Studies										□					M	●
	58.05 Classical Studies, Civilization	●	●	●		M	●	□	□		□	●	●	□		●	●
	58.06 Iberoamerican Studies												†				
	58.07 Indian, Eskimo, Native Studies				†	●					●	■		M		M	
	58.08 Latin-American, Caribbean Studies								†	●	M					●	●
	58.09 Middle and Near Eastern Studies										□						
	58.10 Military and Strategic Studies									●							
	58.11 Soviet, Russian Studies	●	□					□	●		□		●	●		●	
	59.00 History																
	59.01 Ancient History, Civilization	●					M	M	†		●	●	●			M	M
	59.02 History	●	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
	59.03 Medieval, Renaissance Studies	●	M				M	□	●		□	†	●	G		M	M
	59.04 War Studies									G			†				
	60.00 Home Economics and Food Studies																
	60.01 Clothing and Textiles, Design, Fashion			□										●		M	
	60.02 Consumer Studies			●												M	
	60.03 Dietetics			□				●						●			
	60.04 Family Studies, Family Science			□												M	M
	60.05 Home Economics													●		●	
	61.00 Political Science																
	61.01 Canadian Politics	□	†		†		M	M	†			†		G		M	M
	61.02 International Affairs, Relations, Studies	□	G	M	†		M	M	†		□	†		G		●	M
	61.03 Political and Economic Science								†	●			●				†
	61.04 Political Science, Politics	□	□	□	●	●	□	□	□	●	□	●	□	□	□	□	□
	62.00 Regional Studies																
	62.01 Community, Urban, Regional Planning	●		G				G	G		G		□	□		●	
	62.02 Environmental Studies	●	M	□			G		†		□	□	●	□			G

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Universities	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queen's	Royal Military College	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York
Regional Studies continued																
62.03 Geography	●	□	□	●	●	□	□	□		□	□	□	□	□	□	□
62.04 Municipal Administration												†			M	
62.05 Urban Studies, Urbanism	●	M				G				□	†			●	●	●
63.00 Social Sciences: Other																
63.01 Anthropology		□	●	●	●	□		†		□	□	●	□	●	●	□
63.02 Archaeology	●			†		M	M	†		□	●		M	●	M	
63.03 Criminology		●					□			□					M	
63.04 Labour Studies						●									M	
63.05 Law		†					□	□		□			●		●	□
63.06 Legal Studies												†				
63.07 Library Science				+						G			G			
63.08 Organization and Career Development															M	
63.09 Psychology	●	□	□	□	●	□	□	□		□	●	□	□	□	□	□
63.10 Social Welfare						G	G								M	
63.11 Social Work		G		□	●	□				G		●	●	G	□	●
63.12 Sociology	●	□	□	□	●	□	□	□		□	●	□	□	●	□	□
63.13 Women's Studies		M								●		†				●

Programs available at Ryerson Polytechnical Institute

Note:
The following chart is a listing of programs offered at Ryerson Polytechnical Institute. For detailed information on programs see Ryerson's entry on page 108.

Codes:
- • = undergraduate degree program
- + = undergraduate diploma program
- ■ = undergraduate degree and diploma programs

70. Applied Arts	**70.00 Applied Arts**	
	70.01 Fashion	+
	70.02 Graphic Arts Management	•
	70.03 Interior Design	•
	70.04 Journalism	•
	70.05 Photographic Arts	•
	70.06 Radio and Television Arts	•
	70.07 Theatre	+
71. Arts	**71.00 Arts**	
	71.01 Applied Geography	•
	71.02 Arts	+
72. Business	**72.00 Business**	
	72.01 Business Administration	+
	72.02 Business Management	•
	72.03 Hospitality and Tourism Management	•
	72.04 Secretarial and Administrative Studies	•
73. Community Services	**73.00 Community Services**	
	73.01 Early Childhood Education	•
	73.02 Environmental Health	•
	73.03 Food, Nutrition, Consumer and Family Studies	•
	73.04 Nursing	■
	73.05 Social Work	■
	73.06 Urban and Regional Planning	•
74. Technology	**74.00 Technology**	
	74.01 Aerospace Engineering Technology	+
	74.02 Applied Computer Science	•
	74.03 Architectural Science	•
	74.04 Chemical Engineering Technology	■
	74.05 Civil Engineering Technology	■
	74.06 Electrical Engineering Technology	■
	74.07 Industrial Engineering Technology	•
	74.08 Laboratory Science	■
	74.09 Landscape Architectural Technology	+
	74.10 Mechanical Engineering Technology	■
	74.11 Metallurgical Engineering Technology	+
	74.12 Survey Engineering Technology	■
	74.13 Technological Studies	•

How to use this directory

To find a subject in the chart:
(1) locate the desired program name in the index;
(2) note the code number which follows this name; and
(3) turn back to the appropriate numerically coded listing in the chart.

For example, "Systems Design" and a cross-reference, "*Design, Systems*" are listed alphabetically in the index, each with the code number "46.22". This code number can be found in numerical sequence in the chart where it will be seen that "Systems Design" is offered at three of Ontario's universities.

Codes 70.00–74.13 refer to programs available at Ryerson Polytechnical Institute.

Accounting, Accountancy 57.01
Actuarial Science 54.01
Administration, Administrative Studies 57.02
Administration, Business 57.04; 72.01
Administration, Hotel and Food 57.10
Administration, Municipal 62.04
Administration, Public 57.15
Administrative and Office Management Studies 57.03
Administrative and Personnel Studies 57.14
Aeronautical Engineering 46.01
Aerospace Engineering Technology 74.01
African Studies 58.01
Agricultural and Biological Sciences 40
Agricultural Biology, Business, Mechanization 40.01
Agricultural Engineering 46.02
Agriculture 40.00
Agriculture 40.02
Anatomy 50.01
Ancient History, Civilization 59.01
Anthropology 63.01
Applied Arts 70.00
Applied Geography 71.01
Applied Mathematics 45.01
Applied Science 45.02
Applied Sciences 45.00
Archaeology 63.02
Architecture 45.03
Architecture (Landscape) 45.08
Architectural, Landscape 74.09
Architectural Science 74.03
Art Conservation 47.01
Art (Dramatic), Drama 47.05
Art Education 43.01
Art, Fine Arts 47.02
Art, Fine Arts, Theatre 47.00
Art History 47.03
Art (Studio) 47.09
Arts, Theatre 47.10
Arts 71.00
Arts and Science, General 49.02
Arts and Science in Teaching 43.02
Arts, General 49.01; 71.02
Arts, Photographic 70.05
Arts, Radio and Television 70.06
Asian Studies 58.02
Astronomy 55.01
Astrophysics, Geophysics, Space Physics 55.03
Biochemistry 41.01
Biological Engineering 46.03
(Biological Sciences), Biology 41.02
Biological Sciences: Other 42.00
Biology 41.00
Biology (Agricultural), Business, Mechanization 40.01
Biology, Biological Sciences 41.02
Biology, Human 42.02
Biology, Sciences (Marine) 42.03
Biophysics 41.03
Botany (Plant Sciences) 41.04
Business 72.00
Business Administration Option/Mathematics 54.06
Business, Agricultural, Biology, Mechanization 40.01
Business, Business Administration 57.04; 72.01
Business, Commerce, Economics 57.00
Business Economics 57.05
Business Management, Management, Management Sciences 57.12; 72.02
CA Option/Mathematics 54.06
Canadian and International Studies 58.00
Canadian Politics 61.01
Canadian Studies 58.03
Career and Organization Development 63.08
Caribbean, Latin-American Studies 58.08
Ceramic Engineering 46.04
Chemical Engineering 46.05
Chemical Engineering, Nuclear Option 46.06
Chemical Engineering Technology 74.04
Chemical Physics 55.02
Chemistry 56.01
Chemistry Engineering 46.11
Chinese 51.01
Chinese Studies 58.04
Cinema, Film 47.06
Civil Engineering 46.07
Civil Engineering Technology 74.05
Civilization, Classical Studies 58.05
Civilization, History (Ancient) 59.01
Classical Studies, Civilization 58.05
Classics 51.02
Climatology 56.02
Clothing and Textiles, Design, Fashion 60.01
Combinatorics and Optimization 54.02
Commerce 57.06
Communication Arts 51.03
Communications, Mass 51.13
Communicative Disorders 50.02
Communications, Organizational 51.14
Community Services 73.00
Community, Urban, Regional Planning 62.01; 73.07
Comparative Literature 51.04
Computer Engineering 46.08
Computer Science 54.03; 74.02
Consumer, Nutrition, Food and Family Studies 73.03
Consumer Studies 60.02
Criminology 63.03
Dance 47.04
Dental Surgery 50.03
Dentistry 50.04
Design, Fashion, Clothing and Textiles 60.01
Design, Industrial 45.07
Design, Interior 70.03
Design, Systems 46.22
Disorders, Communicative 50.02
Dietetics 60.03
Drama, Dramatic Art 47.05
Early Childhood Education 73.01
Earth (Applied) and Geological Science 45.06
Earth Science 45.04
Eastern Studies (Near and Middle) 58.08
Ecology and Evolution 41.05
Economic and Political Science 61.03
Economics 57.07
Economics, Business 57.05
Economics, Home 60.05
Education 43.00
Education 43.03
Education, Early Childhood 73.01
Education, Elementary 43.04
Education/Physical Education/Recreation 43
Education, Secondary 43.05
Education (Special), Exceptional Children 43.06
Electrical Engineering 46.09
Electrical Engineering Technology 74.06
Elementary Education 43.04
Energy and Fuel Science 56.03
Engineering 46.00
Engineering 46.10
Engineering, Aeronautical 46.01
Engineering Technology, Aerospace 74.01
Engineering, Agricultural 46.02
Engineering and Applied Sciences 45
Engineering, Biological 46.03
Engineering, Ceramic 46.04
Engineering, Chemical 46.05
Engineering, Chemical (Nuclear Option) 46.06
Engineering Technology, Chemical 74.04
Engineering Chemistry 46.11
Engineering, Civil 46.07
Engineering Technology, Civil 74.05
Engineering, Computer 46.08
Engineering, Electrical 46.09
Engineering Technology, Electrical 74.06
Engineering, Fuels and Materials 46.13
Engineering, Geological 46.13
Engineering, Industrial 46.15
Engineering Technology, Industrial 74.07
Engineering, Management 46.16
Engineering, Manufacturing 46.17
Engineering, Mechanical 46.18
Engineering Technology, Mechanical 74.10
Engineering, Metallurgical 46.19
Engineering Technology, Metallurgical 74.11
Engineering, Mining 46.20
Engineering, Nuclear 46.21
Engineering Physics 46.12
Engineering Technology, Survey 74.13
Engineering, Water Resources 46.23
English Language and Literature 51.05
Environmental Health 72.02
Environmental Studies 62.02
Eskimo, Indian, Native Studies 58.07
Evolution and Ecology 41.05
Exceptional Children, Special Education 43.06
Experimental Programs, Independent Studies 53.01
Family Science, Family Studies 60.04
Family Studies, Family Science 60.04; 73.03
Fashion, Design, Clothing and Textiles 60.01; 70.01
Film, Cinema 47.06
Finance 57.08
Fine and Applied Arts 47
Fish and Wildlife Biology 42.01
Food, Hotel Administration 57.09
Food, Nutrition, Consumer and Family Studies 73.03
Food Sciences, Nutrition 42.05
Forestry, Forest Technology 45.05
French Language and Literature 51.06
Fuel and Energy Science 56.03
Fuels and Materials Engineering 46.13
General Arts 49.01
General Arts and Science 49
General Science 49.03
Genetics 41.06
Geography 62.03
Geography, Applied 71.01
Geological and Applied Earth Science 45.06
Geological Engineering 46.13
Geology 56.04
Geophysics, Space Physics, Astrophysics 55.03
German Language and Literature 51.07
Gerontology 57.09
Graphic Arts Management 70.02
Greek Language and Literature 51.08
Health and Physical Education, Physical Education 44.03
Health, Health Studies 44.01
Health Professions and Medical Sciences 50, 50.00
History 59.00

History 59.02
History (Art) 47.03
History, Civilization (Ancient) 59.01
Home Economics 60.05
Home Economics and Food Studies 60.00
Horticulture 40.03
Hospitality and Tourism Management 72.03
Hotel and Food Administration 57.10
Human Biology 42.02
Humanities and Related Courses 51
Iberoamerican Studies 58.06
Illustration (Medical) 47.07
Immunology, Microbiology 42.04
Independent Studies 53.00
Independent Studies, Experimental Programs 53.01
Indian, Eskimo, Native Studies 58.07
Industrial Design 45.07
Industrial Engineering 46.15
Industrial Engineering Technology 74.07
Industrial, Labour Relations 57.11
Interior Design 70.03
International Affairs, Relations, Studies 61.02
Interpretation, Translation 51.18
Italian Language and Literature 51.09
Journalism 51.10; 70.04
Kinesiology 44.02
Laboratory Science 74.08
Labour, Industrial Relations 57.11
Labour Studies 63.04
Landscape Architecture 45.08
Landscape Architectural Technology 74.09
Languages and Literature 51.00
Latin-American, Caribbean Studies 58.08
Latin Language and Literature 51.11
Law 63.05
Legal Studies 63.06
Library Science 63.07
Linguistics, Applied Linguistics 51.12
Literature and Languages 51.00
Management, Business 57.11; 72.02
Management Engineering 46.16
Management, Graphic Arts 70.02
Management, Hospitality and Tourism 72.03
Management, Management Sciences, Business Management 57.12
Management, Resource 57.16
Manufacturing Engineering 46.17
Marine Biology, Sciences 42.03
Marketing 57.13
Mass Communications 51.13
Materials and Fuels Engineering 46.09
Materials Science 56.05
Mathematical and Physical Sciences 54
Mathematical Physics 55.04
Mathematics 54.00
Mathematics 54.04
Mathematics and Physics 54.05
Mathematics, Applied 45.01
Mathematics/CA/RIA/Business Administration Option 54.06
Mathematics, Pure 54.09
Mathematics/Teaching Option 54.07
Mechanical Engineering 46.18
Mechanical Engineering Technology 74.10
Mechanization, Agricultural, Biology, Business 40.01
Medieval, Renaissance Studies 59.03
Medical Illustration 47.07
Medicine 50.05
Metallurgical Engineering 46.19
Metallurgical Engineering Technology 74.11
Metallurgy 56.06
Microbiology, Immunology 42.04
Middle and Near Eastern Studies 58.09
Military and Strategic Studies 58.10
Mining Engineering 46.20
Municipal Administration 62.04
Music 48.00
Music 48.01
Music Education 48.02
Music History, Literature 48.03
Music Performance, Applied Music 48.04
Music Theory, Composition 48.05
Native, Indian, Eskimo Studies 58.07
Near and Middle Eastern Studies 58.09
Nuclear Engineering 46.21
(Nuclear Option) Chemical Engineering 46.06
Nursing 50.06; 73.04
Nursing Education 50.07
Nutrition and Food Sciences 42.05
Nutrition, Consumer, Food and Family Studies 73.03
Occupational Therapy, Physical Therapy, Physiotherapy 50.08
Office Management and Administrative Studies 57.03
Operations Research 54.08
Optimization and Combinatorics 54.02
Optometry 50.09
Organization and Career Development 63.08
Organizational Communications 51.14
Painting 47.08
Personnel and Administrative Studies 57.14
Pharmacology 50.10
Pharmacy 50.11
Philosophy 52.01
Philosophy and Religious Studies 52.00
Photographic Arts 70.05
Physical Education and Recreation 44.00
Physical Education, Physical and Health Education 44.03
Physical Sciences: Other 56.00
Physical Therapy, Occupational Therapy, Physiotherapy 50.08
Physics 55.00
Physics 55.05
Physics and Mathematics 54.05
Physics, Chemical 55.02
Physics (Engineering) 46.11
Physics, Mathematical 55.04
Physics (Space), Geophysics, Astrophysics 55.03
Physiology 50.12
Physiotherapy, Occupational Therapy, Physical Therapy 50.08
(Planning) Community, Urban, Regional 62.01; 73.07
Political and Economic Science 61.03
Political Science 61.00
Political Science, Politics 61.04
Politics, Canadian 61.01
Psychology 63.09
Public Administration 57.15
Pure Mathematics 54.09
Radio and Television Arts 70.06
Recreation 44.04
Regional, Community, Urban Planning 62.01; 73.06
Regional Studies 62.00
Religion, Religious Studies 52.02
Religious Studies, Religion 52.02
Renaissance, Medieval Studies 59.03
Resource Management 57.16
RIA Option/Mathematics 54.06
Russian Language and Literature 51.15
Russian, Soviet Studies 58.11
Science, Actuarial 54.01
Science and Arts, General 49.02
Science, Applied 45.02
Science, Computer 54.03; 74.02
Science, Earth 45.04
Science, Fuel and Energy 56.03
Science, General 49.03
Science, Geological and Applied Earth 45.06
Science, Laboratory 74.08
Science, Materials 56.05
Sciences (Biological), Biology 41.02
Secondary Education 43.05
Secretarial Science, Administration 72.04
Slavic Language and Literature 51.16
Social Sciences and Related Courses 57
Social Sciences: Other 63.00
Social Welfare 63.10
Social Work 63.11; 73.05
Sociology 63.12
Soviet, Russian Studies 58.11
Spanish Language and Literature 51.17
Special Education, Exceptional Children 43.06
Statistics 54.10
Strategic and Military Studies 58.10
Studio Art 47.09
Survey Engineering Technology 74.12
Survey Science 56.07
Systems Design 46.22
Teaching, Arts and Science in 43.02
Teaching Option/Mathematics 54.07
Technological Studies 74.13
Technology 74.00
Technology, Aerospace Engineering 74.01
Technology, Chemical Engineering 74.04
Technology, Civil Engineering 74.05
Technology, Electrical Engineering 74.06
Technology (Forest), Forestry 45.05
Technology, Industrial Engineering 74.07
Technology, Landscape Architectural 74.09
Technology, Mechanical Engineering 74.10
Technology, Metallurgical Engineering 74.11
Technology, Survey Engineering 74.12
Textiles and Clothing, Design, Fashion 60.01
Theatre, Theatre Arts 47.10; 70.07
Theology, Theological Studies 52.03
Therapy, Occupational, Physical, Physiotherapy 50.07
Tourism and Hospitality, Management 72.03
Toxicology 42.06
Translation, Interpretation 51.18
Urban, Community, Regional Planning 62.01; 73.06
Urban Studies, Urbanism 62.05
Veterinary Medicine 42.07
War Studies 59.04
Water Resources Engineering 46.23
Welfare, Social 63.10
Wildlife and Fish Biology 42.01
Women's Studies 63.13
Zoology 41.07

Brock University

St. Catharines

President: Alan J. Earp

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	3 893	80
Part-time	4 000	400

Faculties, Schools and Institutes
College of Education
Faculty of Arts and Sciences
Institute of Urban and Environmental Studies
School of Administrative Studies
School of Physical Education and Recreation
Concordia Lutheran Seminary (affiliated)

General Admission Requirements
For admission to first year, students will ordinarily be required to present an Ontario Secondary School Honour Graduation Diploma, acceptable to the university, with six credits and an overall average of 60%.

One credit in mathematics is strongly recommended for students planning to major in administrative studies, economics, geography, psychology, sociology, or urban and environmental studies.

Bachelor of Arts
Grade 13 English credit

Proof of Proficiency in English
Candidates whose mother language is not English are required to demonstrate proficiency in English, normally by presenting results showing a high level of success in the Test of English as a Foreign Language (TOEFL), from the Educational Testing Service, Princeton, New Jersey. Students must write an English placement test prior to registration and they may be required to enrol in a special English program and take a reduced course load.

Early Admission
All Grade 13 applicants are encouraged to apply as soon as possible. See the introduction on admission to Ontario universities for details of application procedures and deadlines. A candidate must complete Grade 13 to the secondary school principal's satisfaction.

Agricultural and Biological Sciences

• Bachelor of Science

Three-year general four-year honours
Available in: biochemistry, biological sciences.

Admission requirements
Both programs – see "General Admission Requirements"; biological sciences – also required are any two of biology, chemistry, or physics (English and mathematics strongly recommended).

Education/Physical Education/Recreation

• Bachelor of Education
The college of education provides a one-year program leading to an Ontario teacher's certificate and a BEd degree. Admission requires the minimum of a pass degree. A choice of a primary/junior, junior/intermediate, or intermediate/senior option is given to all candidates. Students completing the course will be recommended to the Ministry of Education for an Ontario Teacher's Certificate.

Education courses are also available to undergraduate students. Consult calendar for further details.

• Bachelor of Arts/Bachelor of Education (Child Studies)
For those who plan to teach at the nursery school, pre-kindergarten, or primary levels, childhood education studies integrate academic and professional training in a concurrent BA/BEd degree program. Child studies, a pass BA degree program, also focuses on the theoretical and the practical. Courses include child psychology and development, the family, schools and society, observational research and the needs of the special child.

In co-operation with Niagara College of Applied Arts and Technology, Lambton College of Applied Arts and Technology and Mohawk College of Applied Arts and Technology, a credit transfer formula has been devised. Students may now begin their studies at Niagara, Lambton or Mohawk with the option of transferring credit from Niagara's, Lambton's or Mohawk's diploma program to Brock's degree program, and vice versa.

Admission requirement
Grade 13 English credit.

• Bachelor of Physical Education

Three-year general four-year honours
The program is unique in that it emphasizes a movement approach to physical education. Students may specialize in the areas of adapted movement studies, coaching, child movement studies, health studies, senior adult studies, recreation, and the psychology or sociology of sport. The three-year program, a total of fifteen credits, must contain a three course concentration in a discipline other than physical education.

• Bachelor of Recreation and Leisure Studies

Three-year general four-year honours
This course of study is designed to meet the growing need for people to administer and develop programs in recreation and leisure. Students will be required to take core courses in the philosophy and principles of recreation, community recreation programming, administration and supervision, sociology, psychology, interpersonal and organizational behaviour.

Admission requirement
An acceptable Grade 13 English credit.

Fine and Applied Arts

• Bachelor of Arts

Three-year general
Available in: film studies, music, theatre, visual arts, dramatic literature.

• Bachelor of Arts

Four-year honours
Available in: film studies, music, theatre, visual arts, dramatic literature.

Admission requirements
See "General Admission Requirements, Bachelor of Arts". A Grade 13 English credit is mandatory. For solo performance in music, an audition is required.

Humanities and Related Courses

• Bachelor of Arts

Three-year general four-year honours
Available in: classics (Greek and Latin), English, Germanic and Slavic studies (German and Russian), liberal studies, philosophy, religious studies, romance studies (Italian, French, Spanish).

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Science

Three-year general four-year honours
Available in: chemistry, computer science and information processing, geological sciences, mathematics, physics.

Admission requirements
All programs – see "General Admission Requirements"; chemistry – also required are chemistry, physics and two Grade 13 credits in mathematics; computer science and information processing – also required is English (mathematics strongly recommended); geological sciences – also required are any two of biology, physics, geology or chemistry (mathematics strongly recommended); mathematics – also required are two credits in mathematics (a third mathematics credit and a credit in English are recommended); physics – also required are chemistry, physics and two credits in mathematics (a third credit in mathematics strongly recommended).

Social Sciences and Related Courses

• Bachelor of Administration

Honours program
The administrative studies program is designed for students who intend to pursue careers in the public sector (various levels of government, health, education) or in the private sector (industry, commerce, labour). Although professionally oriented, the program is solidly based on the social sciences, particularly in the first two years. In this way, students develop a strong academic background as well as specific managerial skills. Seven areas of concentration are offered: accounting, computer science, finance, general management, marketing, organizational behaviour/personnel, and quantitative analysis.

Co-op accounting option
Theory and practice are combined in this pre-professional program. Participants will alternate work and study periods for five years, and then may move directly to the chartered accountant exam preparations (the "regular" stream requires four years of university followed by two or three years with a chartered accounting firm). Enrolment in each session will be limited.

Admission requirements
An accepteble Grade 13 English credit, (mathematics recommended). A 65% average is required for entry into the honours program. Applicants to the co-op accounting program should have an overall Grade 13 average of close to 80%; personal interviews are usually conducted in the spring.

• Bachelor of Arts

Three-year general
Available in: Asian studies, Canadian studies, child studies, communication studies, economics, geography, Germanic and Slavic studies

(German and Russian)*, history, politics, psychology, sociology, urban and environmental studies.

• Bachelor of Arts

Four-year honours
Available in: Asian studies, Canadian and European community studies, Canadian studies, child studies, communication studies, economics, geography, Germanic and Slavic studies (German and Russian)*, history, politics, psychology, sociology, urban and environmental studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Business Economics

General program
Offered jointly by the departments of economics and administrative studies, this innovative degree program is designed for students who wish to combine the study of business and economics. Graduates will be prepared for careers in both the public and private sectors.

Admission requirements
Grade 13 English, (mathematics recommended).

• Bachelor of Science

Three-year general four-year honours
Available in: urban and environmental studies (when combined with science).

Admission requirements
See "General Admission Requirements".

• Urban and Environmental Studies (Institute of)

General and honours
The program provides an interdisciplinary focus on urban and environmental studies combined with a sound background in the natural and social sciences. Combined degree programs are offered in conjunction with the departments of biological sciences, chemistry, economics, geography, geological sciences, politics, and sociology.

Admission requirements
Students officially enter the program at the beginning of second year following a prerequisite first-year program in the collateral discipline of their choice.

Co-op program
In addition to the regular system of the September to April school year, the co-operative system of study is also available. Students alternate academic study with four- or eight-month working terms with related firms or agencies. This practical on-the-job training is available to students of good academic standing. Details of the internship program are available from the Institute Co-ordinator.

Special Programs

• Extradepartmental Studies
The university offers a variety of degree credit courses which do not fall under the auspices of existing departments. Although one cannot major in extradepartmental studies, the courses may be taken for credit as electives in any program. Areas of study include women's studies and Asian culture.

*For the purposes of Brock University, this course falls under the Humanities heading.

• Interdepartmental Programs
Students who wish to diversify their studies over two or more subject areas, and who do not want to tie themselves to a combined major, may plan an interdepartmental program. Courses are selected from several departments so that students may focus on an area of study of particular interest.

• Grade 12 Summer Program
The Grade 12 summer program is a five-week introduction to the demands and rewards of university life. Students attend classes taught by senior faculty, exploring a special curriculum that simulates first year study. The special curriculum includes studies in the humanities (English, philosophy, drama and film or history), the social sciences (politics or psychology), mathematics, science for non-science majors (biology), and science for science majors (chemistry, physics).

Program costs are minimal; there are no tuition fees. Students are, however, responsible for purchasing some textbooks, which should not exceed a total of $70. Residence accommodation is available on campus. Room and board (any 14 meals per week) is approximately $450. Details of residence life will be mailed to those students who are accepted into the program.

Outstanding students are awarded university scholarships of $500 or $1 000; some may receive an additional $1 000 residence scholarship. These awards may be renewed for up to four years. All students are eligible to apply for financial assistance through the Ontario Student Assistance Program (OSAP).

Residence 1982-83
Single room $1 345, double room $1 165. Three meal plans are available: 10 meals per week, $1 170; 14 meals, $1 265; and 19 meals, $1 310. There will be an approximate increase of 5% for 1983-84.

Scholarships and Financial Assistance
Entrance scholarships are automatically awarded on the basis of academic excellence; no application is necessary. Normally, all students with an overall Grade 13 average of 80%.

Government assistance is available to full- and part-time students in the form of grants and/or loans. (For more information concerning these programs see the introductory section on "Financial Assistance for Students".)

Questions about scholarships, bursaries, awards and loan programs should be directed to the Student Awards Office.

Tuition Fees 1983-84
(including incidental fees)
Full- and part-time students $235 per course. A full year program consisting of five courses is $1 175.

Visa students: (new students) $780 per course. Five full courses $3 900.

Further Information
Inquiries about admission requirements should be directed to
Admissions Officer
Office of the Registrar
Brock University
St. Catharines, Ontario L2S 3A1

Information about student awards and loans may be obtained from
Student Awards Office
Brock University
St. Catharines, Ontario L2S 3A1

Inquiries about the Grade 12 summer program should be directed to
Dean of Students
Brock University
St. Catharines, Ontario L2S 3A1

Inquiries about university information programs for secondary schools should be directed to
Liaison and Information office
Brock University
St. Catharines, Ontario L2S 3A1
Telephone (416) 688-5550, ext. 245

Carleton University

Ottawa

President: William Beckel

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	8 500	987
Part-time	4 892	849

Faculties, Schools and Institutes
Faculty of Arts
Faculty of Engineering
Faculty of Graduate Studies and Research
Faculty of Science
Faculty of Social Sciences
Institute of Biochemistry
Institute of Canadian Studies
Institute of Soviet and East European Studies
School of Architecture
School of Business
School of Computer Science
School of Continuing Education
School of Industrial Design
School of International Affairs
School of Journalism
School of Public Administration
School of Social Work

General Admission Requirements
For the qualifying university year: Ontario Secondary School Graduation Diploma with a minimum 70% average. A minimum of 10 credits taken at the Grade 11 and 12 advanced or enriched level must be presented.

For the first year of a degree program: completion of an Ontario Secondary School Honour Graduation Diploma with a 60% average (65% for honours and some professional programs).

Bachelor of Arts (from Grade 12)
An Ontario Secondary Graduation Diploma with a minimum 70% average and including two of the following from Grade 12: English, a language other than English, or mathematics. A minimum of 10 credits taken at the Grades 11 and 12 advanced or enriched level must be presented.

Bachelor of Arts (from Grade 13)
An Ontario Secondary School Honour Graduation Diploma with a minimum 60% average (65% for honours). For a major in mathematics, functions and calculus must be presented. For majors in biology and economics, functions and calculus are strongly recommended. For a major in psychology, English is recommended. For a major in Canadian studies, French is recommended.

Bachelor of Science (from Grade 12)
An Ontario Secondary School Graduation Diploma with a minimum 70% average and an appropriate preparation in mathematics, chemistry and physics and Grade 12 mathematics. A minimum of 10 credits taken at the Grade 11 and 12 advanced or enriched level must be presented.

Bachelor of Science (from Grade 13)
An Ontario Secondary School Graduation Diploma with a minimum 60% average (65% for honours) and credits in functions, calculus and two sciences. While biology, chemistry, geology and physics are the subjects normally accepted as sciences, the university will consider other courses on an individual basis. Prospective students should note that, while only a 60% general average is required for admission, they should have at least 60% or third class honours in the mathematics and science subjects offered.

Limited Enrolment Admission
Applicants should note that because of limited enrolment in certain programs, holding the minimum admission requirements can only establish eligibility for selection by the university. This is particularly true for admission to the Bachelor of Architecture, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Engineering, Bachelor of Journalism and Bachelor of Industrial Design and Bachelor of Science programs.

Agricultural and Biological Sciences

• Bachelor of Arts

Three-year general/four-year honours
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: biology

• Bachelor of Science

Four-year honours
Available in: biochemistry, biology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Engineering and Applied Sciences

• Bachelor of Architecture
A five-year program leading to a Bachelor of Architecture degree, and offering a highly varied experience for the student in lectures, seminars, projects and workshops.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a minimum 60% average and credits in functions, calculus and physics. Applicants are required to submit a portfolio, a biographical resume and a typewritten statement (500 words) outlining reasons for wishing to study architecture at Carleton. Submission of a portfolio is strongly recommended. Interviews will only be given at the discretion of the Admissions Committee.

Note: This is a limited enrolment program.

• Bachelor of Engineering
Four years, including two and one-half years of foundation studies in mathematics, physics, chemistry and engineering sciences and one and one-half years of specialization in civil, electrical or mechanical engineering. For computer systems engineering the first, and to some extent, the second year provides the foundation studies, followed by two years of specialization.

Grade 12 requirements for admission
An Ontario Secondary School Graduation Diploma with a minimum 70% average and an appropriate preparation in chemistry, physics and Grade 12 mathematics. A minimum of 10 credits taken at the Grades 11 and 12 advanced or enriched level must be presented.

Grade 13 requirements for admission
An Ontario Secondary School Honour Graduation Diploma with a minimum 65% average and credits in functions, calculus, chemistry and physics.

Incorrect Grade 13 course patterns
A student unable to meet the specific course requirements above, but otherwise admissible to Carleton University, may be admitted to the first year but will be required to satisfy the outstanding requirements at the qualifying university year level.

• Bachelor of Industrial Design
A four-year program, industrial design tends to embrace all aspects of human environment which are conditioned by industrial production.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a minimum 65% average and credits in functions, calculus, chemistry and physics. Applicants must arrange for an interview. Submission of a portfolio is optional, but is strongly recommended.

Note: This is a limited enrolment program.

Fine and Applied Arts

• Bachelor of Arts

Three-year general/four-year honours
Available in: art history, film studies, music.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Music

Four-year honours
A four-year program designed principally to promote an intellectual and aesthetic understanding of music within a broad liberal arts framework. Although individual performance instruction is required throughout the four years as an adjunct to academic study, the areas of major concentration offered are music history/musicology and theory/composition.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a minimum 65% average. It is expected that students entering the BMus program would have Grade 13 music, the appropriate level of conservatory music, or both.

• Diploma in Music
This program (five courses) is designed to attract individuals who have a background in performance on a musical instrument or voice, and/or have been involved in the teaching of music, and who are desirous of obtaining additional academic qualifications.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with an adequate level of performance. Special consideration will be extended to other applicants under mature matriculation regulations.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: classical civilization/classics (Greek and Latin), English, French, German, Italian, linguistics, mass communication, philosophy, religion, Russian, Spanish.

• Bachelor of Arts

Four-year honours
Available in: classical civilization/classics (Greek and Latin), English, French, German, Italian, linguistics, mass communication, philosophy, religion, Russian, Spanish.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Journalism

Honours program
The aim of this four-year program is not to train technologists; it is to give students the ability to investigate, interpret and communicate intelligently in any of the mass media. A student can also combine honours level work in arts, science or commerce with professional training in journalism.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a minimum 65% average and a credit in a language other than English (French is recommended).
Note: This is a limited enrolment program.

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general
Available in: computer mathematics, mathematics.

• Bachelor of Arts

Four-year honours
Available in: computer mathematics, mathematics, operations research, statistics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Computer Science
A four-year honours program in computer science. The program is designed with five areas of specialization: software, hardware, theory of computing, scientific applications, and management and business systems.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a minimum of 65% average including functions and calculus. Physics is required for the hardware and scientific applications areas of specialization and is advantageous for the remaining areas.
Note: This is a limited enrolment program.

• Bachelor of Science

Three-year general/four-year honours
Available in: chemistry, computer mathematics, geology, integrated science studies†, mathematics, operations research, physics, and statistics (honours only).

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general
Available in: Canadian studies*, classical civilization/classics (Greek and Latin)*, criminology and criminal justice, economics, geography, history*, law, political science, psychology, sociology.

• Bachelor of Arts

Four-year honours
Available in: anthropology, Canadian studies, classical civilization/classics (Greek and Latin)*, criminology and criminal justice, economics, geography, history*, law, political science, psychology, sociology, Soviet and East European studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Commerce
A four-year honours program in management studies. The objective of the program is to prepare students for management positions in business or government. Some specialization is available in accounting and finance, marketing and business systems, labour and industrial relations.

Admission requirements
OSSHGD with a minimum 65% average and credits in functions and calculus.
Note: This is a limited enrolment program.

• Bachelor of Public Administration

A four-year honours program which provides a general education that will familiarize public servants and students contemplating a career in government service with the main organizational, political, economic and legal elements of the environment of the public service.

Admission requirements
OSSHGD with a minimum 65% average.

• Bachelor of Arts

Four-year honours
Available in: geography, psychology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Special Programs

• Certificate in English Language and Compositon
This in-service certificate (five courses) is intended primarily for practising teachers who wish to upgrade their knowledge of those areas of language and writing theory which underlie the new Ontario Guidelines and support documents.

Admission requirements
A university degree or teaching certificate.

• Certificate in French Language Studies
A six-course program to permit people with some knowledge of French to achieve a high level of proficiency.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with 60% overall average and facility in French to completion of an intermediate level university course.

• Certificate in Law Enforcement Studies
This certificate (six courses) is designed primarily for persons employed in the areas of law enforcement, national security, or corrections who wish to take university courses.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with a 60% overall average or mature matriculation, or junior matriculation and three years service in a police force or equivalent agency.

• Certificate in Public Service Studies
A six-course program designed for public employees who seek special training in public service studies at the undergraduate level.

Admission requirements
An Ontario Secondary School Graduation Diploma. Experienced applicants without the OSSGD will be considered on merit. The completion of certain subjects at Carleton may be required before admission.

• Certificate in the Teaching of English as a Second Language
A five-course program including theory and practice in teaching English as a second language and various optional courses.

Admission requirements
An undergraduate degree in linguistics or another subject, or extensive experience in teaching.

• Diploma in Music
This program (five courses) is designed to attract individuals who have a background in performance on a musical instrument or voice, and/or have been involved in the teaching of music, and who are desirous of obtaining additional academic qualifications.

Admission requirements
An Ontario Secondary School Honour Graduation Diploma with an adequate level of performance. Special consideration will be extended to other applicants under mature matriculation regulations.

• Integrated Science Studies
A Bachelor of Science major or honours program designed for those students who wish to develop an understanding of the scientific method, and at the same time to acquire a knowledge of the humanities, social sciences or certain selected parts of engineering.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Residence 1983-84
Single rooms $2 735
Double rooms $2 490

Scholarships and Financial Assistance
Government assistance is available to full- and part-time students in the form of grants and/or loans.

For further information concerning government assistance see the introductory section on "Financial Assistance for Students" or check with the university's Student Awards Office. The Student Awards Officer will also have details on bursaries and scholarships offered by the university.

†See "Special Programs" section for details.

*For the purposes of Carleton University, this course falls under the Humanities heading.

Tuition Fees 1983-84
(including incidental fees)
Full-time students
Arts, commerce, public administration, journalism, music, science, computer science $1 275.30
Architecture, engineering, industrial design $1 370.30
Qualifying year $1 605.30

Part-time students (per subject including incidental fees)
Degree and non-degree programs $249.30

Further Information
Inquiries about admission should be directed to
Office of Admissions
Room 315, Administration Building
Carleton University
Ottawa, Ontario K1S 5B6
Telephone (613) 231-3730

Inquiries about student awards and loans should be directed to
Awards Office
Room 202, Administration Building
Carleton University
Ottawa, Ontario K1S 5B6
Telephone (613) 231-3735

Inquiries about university information programs for secondary schools should be directed to
Student Liaison Office
Room 315, Administration Building
Carleton University
Ottawa, Ontario K1S 5B6
Telephone (613) 231-2738
(Collect calls accepted at this number only)

University of Guelph

Guelph

President: Donald F. Forster

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	9 695	816
Part-time	1 554	152

Faculties, Schools and Institutes
College of Arts
College of Biological Science
College of Family and Consumer Studies
College of Physical Science
College of Social Science
Ontario Agricultural College
Ontario Veterinary College
Faculty of Graduate Studies
Office of Research
University School of Rural Planning and Development
University School of Part-time Studies and Continuing Education
School of Agricultural Economics and Extension Education
School of Engineering
School of Hotel and Food Administration
School of Human Biology
School of Landscape Architecture
Institute of Computer Science
Centre for International Programs

General Admission Requirements
Applicants should qualify for the Ontario Secondary School Honour Graduation Diploma with standing in specific Grade 13 subjects as required by the particular degree program.

Bachelor of Arts
Although there are no specific subject requirements, students are strongly encouraged to have one credit in Grade 13 English and either one credit in a Grade 13 language other than English or a Grade 13 credit in mathematics.

Commencing in January 1984: Year 5 subject requirements – 1 credit in English, 5 additional credits. Students are strongly encouraged to offer a credit in mathematics or a credit in French (or other language) among the additional five credits. Also, students planning on entering programs in the social sciences or mathematical sciences are advised that it would be advantageous to include a mathematics course such as calculus, algebra or functions and relations.

Semester one is taken common by both honours and general students. Thus the selection of a final program may be delayed until the second semester. Semester one students must normally take one 100 level course from each of two different departments in the College of Arts and one 100 level course from each of two different departments in the College of Social Science. The general program is designed to provide a sound general education, allowing for varying degrees of specialization in one or more subjects and requiring intensive study at a senior level. To graduate from this program a student must pass 30 courses including at least 8 courses at the 300 level.

Students may choose from three patterns of study:
1. *Major:* To graduate with any of the following subjects as a major, a student must successfully complete at least 10 semester courses in that subject.
2. *Double Major:* Students may graduate with two subjects as majors by passing at least 10 semester courses in each subject.
3. *Individual Study Pattern:* Normally students choose a pattern of study from those offered in the BA program. In some instances a student, because of special needs or academic interests, may wish to draw on the resources of several disciplines in a way not provided for in the regular offerings. Students must ensure that at least 18 of the required 30 courses are from courses offered by the College of Arts, the College of Social Science, the Department of Computing and Information Science and the Department of Mathematics and Statistics.

The Honors Program, consisting of eight semesters, is designed to provide intensive study in one or two subject areas while at the same time ensuring a complementary breadth of education. To graduate from this program a student must sucessfully complete 40 semester courses, including at least 14 courses at the 300 level or above. There are three main patterns of study which a student may follow:
1. *Specialized Honors:* requiring successful completion of at least 22 semester courses.
2. *Major and Minor Honors:* requiring a combination of specializations in two subject areas totalling 28 successfully completed semester courses including at least 16 courses in the major and at least 10 courses in the minor.
3. *Combined Honors:* requiring successful completion of at least 14 semester courses in each of 2 subjects chosen.

Bachelor of Science
One credit in mathematics, two credits from biology, chemistry or physics, one additional credit from biology, chemistry, mathematics or physics, and two additional credits.

Applicants are advised to include functions and relations and one credit of English in their Grade 13 program of studies. Applicants who lack one specific Grade 13 subject requirement but who have a high overall Grade 13 standing are also encouraged to apply for admission.

Students contemplating admission to the Doctor of Veterinary Medicine program should include the following courses in their Grade 13 program of studies: functions and relations, biology, physics and chemistry.

Students in the general and honours Bachelor of Science programs take the same basic courses in the first and second semesters. The final selection of a general or a specific honours program may thus be delayed until the third semester. The general program has a broad general training whereas in the honours program the student has the following options: the honours science program (without specialization) which permits study in the general program; honours science with major and minor; and honours program which provides for specialization in the physical, biological or food science areas. Course options in the general (six semesters) program and honours (8 semesters) program are given under specific subject areas (see calendar for full details).

Innovations in Secondary School Subjects
The university will consider for credit, courses regarded as innovations in the Ontario secondary school system if they are approved by the Ontario Ministry of Education.

Fall Semester Admission
Studies begin in September. Fall semester ad-

mission to all programs may be granted to candidates who satisfy in full the general entrance requirements.

Winter Semester Admission
Studies begin in January. Under an agreement with the Ontario Ministry of Education, the University of Guelph admits to the first semester of the degree programs in arts, science, engineering, human kinetics, family and consumer studies, and agriculture, a number of students of promising scholastic ability who are in Grade 13 for the first time, have an estimated minimum average of 64% and are attending a semestered secondary school. These students are admitted directly from secondary school and commence study at the university in early January. Candidates who have delayed entry to the university, for various reasons, may also apply at this time. Admission may only be granted to candidates who satisfy in full the general program entrance requirements. The university will grant the University of Guelph Matriculation Certificate should the student not be eligible to receive the Ontario Secondary School Honour Graduation Diploma. Students should refer to the undergraduate calendar or admissions handbook for complete details about winter admission.

Spring Semester Admission
Studies begin in May. Spring admission to the arts, science, human kinetics, agricultural science, and family and consumer studies programs may be granted to candidates who satisfy the general entrance requirements above and who are enrolled in Grade 13 for the first time and have an estimated minimum average of 64%. Students accepted under the Spring Admission Plan are granted an Ontario Secondary School Graduation Diploma or the University of Guelph Matriculation Certificate. An Ontario Secondary School Honour Graduation Diploma will only be granted when students can arrange a suitable timetable with the principal of their school to complete the required credit hours before spring semester registration.

Early Acceptance
(Acceptance for September on the date agreed to by the Ontario Universities Council on Admissions. See page 73.
Early acceptance to all programs may be granted to candidates who satisfy in full the general entrance requirements and who are enrolled in Grade 13 for the first time and have an estimated minimum average of 60%.

Agricultural and Biological Sciences

• Associate Diploma in Agriculture
Four semesters. The program is designed to give students an appreciation of science and its application to agriculture. After a common first semester, students specialize in one of three divisions: agri-business, farm operators and managers, or horticulture with an emphasis in fruit and vegetable production or nursery and landscape.

Admission requirements
The minimum academic requirement for admission is an Ontario Secondary School Graduation Diploma or its equivalent. In addition, applicants must provide proof of having the equivalent of at least three months of approved agricultural experience in some phase of agriculture in a temperate climate. Experience in farming or farm-related business is acceptable.

Starting in September, 1985, successful completion of Grade 12 English and mathematics at the advanced or general level will be required for admission. Applicants who do not meet the English or mathematics requirement but otherwise have a good academic record and agricultural experience may be considered for admission.

A final decision on the admissibility of an applicant will be based on a review of academic performance and the Background Information Form for the Associate Diploma in Agriculture program. The Background Information Form will be forwarded to applicants following the application deadline of April 1.

• Bachelor of Science

Three-year general
Available in: biological science.

• Bachelor of Science

Four-year honours (specialization)
Available in: biochemistry, biophysics, botany, ecology, fisheries biology, genetics, geography, human biology, marine biology, microbiology, nutrition and biochemistry, psychology, toxicology, wildlife biology, zoology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

• Bachelor of Science in Agriculture

Honours program
Eight semesters. The program is designed to provide fundamental education in the science of agriculture. The first two semesters feature a common curriculum and students may select a major from one of several areas before the commencement of the third semester. A major can be chosen from one of the following areas of specialization: agricultural business, agricultural economics, agricultural mechanization, animal and poultry science, applied microbiology, crop science, dairy science, entomology/apiculture, environmental biology, horticultural science, plant protection, resources economics and rural development, resources management, and soil sciences.

The curriculum also provides an opportunity for students to elect, if they so wish, a minor that will complement their selection of a major. Students wishing to concentrate their elective courses in a particular area are advised to consult the schedule of studies for the various minors available in the program.

Minors are available in agri-business studies, extension education, international agriculture, resources economics, animal and poultry science.

Admission requirements
One credit in mathematics, two credits from biology, chemistry or physics, one additional credit from biology, chemistry, mathematics or physics, and two additional credits.

Whereas students are required to have the credits as specified in the admission requirements, it is advisable for students who wish to obtain the optimum preparation in Ontario Grade 13 to take the following credits: functions and relations, a second mathematics, chemistry, physics, biology and English.

Applicants who lack one specific Grade 13 subject requirement but who have a minimum of 70% overall Grade 13 standing are also encouraged to apply for admission.

Applicants are selected for admission on the basis of academic performance, and if required by the Admissions Committee, on the review of a Background Information Sheet to be submitted upon request.

• Doctor of Veterinary Medicine
Eight semesters. Course of study prescribed. Students are selected for admission to a pre-veterinary year of two semesters from which they may proceed to the first semester of the program leading to the degree Doctor of Veterinary Medicine. As this will be the procedure for admission to the veterinary medicine program, candidates should ensure that they satisfy the admission requirements as specified for the pre-veterinary year.

Application procedure
Application forms are available upon request from the Admissions Section, Office of the Registrar, Level 3, University Centre, University of Guelph, Guelph, Ontario N1G 2W1. Application forms must be submitted no later than February 1 of the year for which admission to the pre-veterinary year is sought. The admission procedure will be conducted during the summer months and successful candidates will then register for the pre-veterinary year that will proceed through the fall and winter semesters. Academic transcripts and other supporting documents must be submitted no later than June 15 following the February 1 deadline for submission of the applications. Prospective candidates will be expected to provide other documents such as background information as the admission process continues.

Residence requirements
The Ontario Veterinary College is one of two veterinary colleges that serve all of English-speaking Canada. Canadian citizens or individuals with permanent resident status of at least one year's duration who are resident east of the Manitoba/Ontario border will be considered for admission to the Ontario Veterinary College. "Resident" in this context is interpreted to mean someone who has resided in Ontario or another eastern province for twelve months exclusive of time spent in post-secondary educational institutions. Candidates whose home location is west of the Manitoba/Ontario border are advised to apply to the Western College of Veterinary Medicine, Saskatoon. Applicants from countries that do not have appropriate veterinary education facilities will be considered if they satisfy the standards specified for Canadian applicants. Preference in this category may be given to those students sponsored by the Canadian International Development Agency. Students from countries that have appropriate veterinary educational facilities will not be considered under normal circumstances.

Academic requirements
Applicants who have completed one or more academic years of an Ontario university level program or the equivalent, including the following specific course requirements, are eligible to apply to the pre-veterinary year: biological sciences – two semester courses; chemistry – two semester courses; mathematics – one semester course; physics* – two semester courses; humanities or social sciences – two semester courses; electives – one semester course.

This preparation need not be completed in a specialized college or faculty or in a designated pre-veterinary program. Students wishing to undertake their preparatory work at the University of Guelph should seek admission to the BSc (Human Kinetics) or the BSc (Agr) programs.

*For students registered in the BSc (Agriculture) program at Guelph, earth science may be substituted for one semester course in physics with the provision that the one physics course presented is biophysics.

Students who wish to undertake their preparatory work at another university should select an institution that offers the specific course requirements listed above as part of a degree program and that has rigorous entrance requirements and a reputation for academic quality.

Because of limitations in class size in the pre-veterinary year (and the DVM program), all candidates should have a secondary career objective. The best preparation for the pre-veterinary year is to fulfill all course requirements while attaining excellence in the preparation for an alternative career.

Selection criteria
Since the number of students who satisfy the specific course requirements exceeds the number of available spaces in the pre-veterinary year, the Sub-committee on Admissions may use the following criteria to determine those who will be admitted to the pre-veterinary year. The members of the Sub-committee endeavor to select those well-qualified applicants who, in their judgement, will be best able to successfully complete the veterinary medicine curriculum, and who exhibit potential to become competent, responsible veterinarians dedicated to a lifetime of productive public service and continued learning.

Academic achievement and aptitude
In view of the need to efficiently and quickly learn large amounts of factual material and to solve problems, applicants must have demonstrated achievement in the comprehension of scientific material. This will be evaluated by the scrutiny of transcripts and previous academic records. Only those candidates who achieve a mid-"B" average on the basis of university level prerequisite subjects and on the basis of performance in the last two full-time semesters at the undergraduate level will be considered beyond the initial step. Attention will be paid to both the quality and consistency of grades in the program presented as preparation for admission, particularly for those students who have spent more than the minimal time in preparation.

Performance on essays and other test procedures
As experience indicates that these procedures are valuable and fair to the students involved, they will be utilized to screen students initially or to select students for interview.

Interviews
Interviews conducted under carefully regulated conditions can give candidates an opportunity to display their ability to communicate effectively and give the interviewers an opportunity to assess students' attitudes and sensitivities for veterinary medicine. Such interviews are subjective evaluations carried out between individual, selected candidates and three experienced interviewers, at least two of whom are veterinarians. Stuoents ought to present evidence of experience and knowledge pertaining to animals beyond a simple love of animals. Such achievements can be associated with jobs or experience with breeding, rearing, feeding and showing various kinds of animals including pets, zoo animals, farm animals and wildlife. It can also be associated with teaching or research in basic medical sciences. Candidates should be familiar with the duties and responsibilities of veterinarians and the scope of veterinary medicine.

Personal characteristics
The committee endeavors to select candidates who display integrity, reliability, maturity and determination. It is important that professional people have excellent communicative skills, poise and attributes of leadership, and that they have a talent for effectively working with others.

Education/Physical Education/Recreation

• Bachelor of Science in Human Kinetics

Honours program
Eight semesters. A human kinetic studies program with emphasis in the areas of scientific application to human activity. Science-oriented subjects, particularly toward the biological sciences, include anatomy, biology, nutrition, physiology, psychology and sociology. Interdisciplinary subject matter includes kinesiology, exercise physiology and scientific measurement of human performance.

Admission requirements
One credit in mathematics, two credits from biology, chemistry or physics, one additional credit from biology, chemistry, mathematics or physics, and two additional credits.

Applicants are advised to include functions and relations in their Grade 13 program of studies. Applicants who lack one specific Grade 13 subject requirement but who have a high overall Grade 13 academic standing are also encouraged to apply for admission.

Engineering and Applied Sciences

• Bachelor of Landscape Architecture

Honours program
Eight semesters. The first four semesters are largely devoted to basic study in basic design, landscape design, urban planning and the natural sciences. In the final four semesters emphasis is placed on professional courses in landscape design, planning and construction, but with the addition of social sciences and humanities to give sound direction to the practice in design and planning.

Admission requirements
Students must have successfully completed at least one academic year (i.e. a minimum of 10 semester courses or the equivalent) of a university-level program.

Students should have taken a one-semester (or half-year) course or the equivalent in each of introduction to design, history of cultural form and plant biology. It is possible to meet these requirements in most undergraduate degree programs at Guelph.

The Grade 13 subject requirements for each undergraduate degree program are listed in the calendar.

Applicants must complete background information sheets that will be forwarded to them after the April 1 application deadline. Those selected for interviews are usually required to submit a portfolio of related creative work.

Application procedure
Application forms are available from the Admissions Section, Office of the Registrar, Level 3, University Centre, University of Guelph, Guelph, Ontario N1G 2W1. Deadline for the submission of applications is April 1 of the year for which admission is sought. Academic transcripts and other supporting documents must be submitted no later than June 15 following the April 1 deadline for submission of the applications.

• Bachelor of Science

Four-year honours (specialization)
Available in: applicable mathematics, applied chemistry, biochemistry, biophysics, chemical physics, chemistry, computing and information science, earth science, mathematics, physics, statistics, theoretical physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

• Bachelor of Science in Engineering

Honours program
Eight semesters. Students in this program obtain a liberal engineering education which enables them to undertake the solution of engineering problems of the biological world and the associated environment of soil, water and atmosphere. Core subjects, combined with liberal elective opportunities, give an understanding of the environment in which food is produced and human activity takes place. This understanding is used to develop capability to design machines, structures and operational systems to operate within the environment. Concern over both urban and rural environment is opening new challenges for engineers to optimize the use made of air, water and land for the community at large.

Career opportunities are open in many segments of the economy. Examples are: agricultural and food industries for production, processing, storage and transportation; resources agencies in advisory, regulatory, planning and utilization; service industries of construction, power and water supply, and public health; manufacturing industries for design, testing and production of machinery and structures for farm and forest; private consulting services to municipalities, utilities and industry. Many engineers assume management responsibilities after gaining experience in design, development and operations. The liberal education in life, earth and agriculture sciences in addition to the social sciences and humanities prepares students for career mobility. Students must select a major area of study in one of the following: agricultural engineering, biological engineering, water resources engineering.

Admission requirements
Calculus, functions and relations, algebra, physics, chemistry and one additional credit.

Fine and Applied Arts

• Bachelor of Arts

Three-year general/four-year honours
Available in: art history, drama, fine art, music, studio art.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: English, French, German, Greek, Italian, Latin, linguistics, philosophy, Spanish.

• Bachelor of Arts

Four-year honours
Available in: English, French, German, Italian, Latin, philosophy, Spanish.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general
Available in: computing and information science, mathematics, statistics.

• Bachelor of Arts

Four-year honours
Available in: computing and information science, mathematical science (minor honours only), mathematics, statistics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: chemistry, mathematical science, physics.

• Bachelor of Science

Four-year honours
Available in: applicable mathematics, applied chemistry, chemical physics, chemistry, computing and information, mathematics, physics, statistics, theoretical physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Applied Science (Faculty of Family and Consumer Studies)

Honours program
Students in the eight semester honours program in family and consumer studies (Bachelor of Applied Science) select one of four major areas of study: family studies, consumer studies, applied human nutrition or child studies. The program is interdisciplinary and provides a distinctive and integrated focus of applied science in each of the four majors. Courses from the traditional disciplines in other colleges in the university are coupled with courses offered by faculty members in the College of Family and Consumer Studies whose own backgrounds reflect the interdisciplinary nature of the college. Laboratory, practicum and field experiences enhance the students' opportunities to grasp the contributions of the social, physical and biological sciences to significant facets of human behavior and experience, whether in family, community, or educational settings or in the market place.

Students may enter the program in the spring, fall or winter semesters. Upon admission or following one or two semesters in the program, students select one of the four major areas of study.

Admission requirements
One credit in mathematics, one credit in chemistry or biology, one additional credit chosen from the following group: English, biology, chemistry, mathematics, physics, and three additional credits.

Applicants are advised to include functions and relations in their Grade 13 program of studies. Students are advised to consult the schedule of studies for the BASc program in the university calendar to determine the appropriate selection of Grade 13 credits for the major area of proposed study.

• Bachelor of Arts

Three-year general
Available in: Canadian studies, classical archaeology, classical studies, economics, geography, history, international development, management economics, political studies, psychology, settlement studies, sociology/anthropology, women's studies.

• Bachelor of Arts

Four-year honours
Available in: business administration (minor honours only), Canadian studies (major or minor honours only), classical studies (minor honours only) consumer studies (minor honours only), economics, environmental studies (minor honours only), geography, history, international development (minor honours only), management economics, political studies, psychology, settlement studies (minor honours only), sociology/anthropology, women's studies (minor honours only).

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Four-year honours
Available in: geography, psychology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

• Bachelor of Commerce (Hotel and Food Administration)

Honours program
Eight semesters. The program in the School of Hotel and Food Administration is of an interdisciplinary nature drawing on courses in the humanities, social science, food science, physical and biological sciences. It is designed to give students both a broad exposure to the basic disciplines (e.g. psychology, chemistry, sociology, economics) and a sound professional management education which prepares the graduates to assume positions of responsibility in the accommodation and/or food service industries. Work experience in the hospitality industry is required for students to graduate from this program.

Students in the program in Hotel and Food Administration may select one of two majors: hotel and food administration or institutional food-service management.

Admission requirements
One credit in mathematics, one additional credit chosen from the following group: English, chemistry, a second language; and four additional credits. Applicants who wish to obtain the optimum preparation are advised to include chemistry and English in their Grade 13 program of studies.

Special Programs

• General Studies Program
The objective of the general studies program is to provide persons the opportunity to take university courses before registering in a specific degree program or to take university courses for general interest with no immediate intention of registering in a degree program. The general studies program does not lead towards a specific undergraduate degree at the University of Guelph. Students may register for full- or part-time studies. Contact Admissions, Office of the Registrar.

Admission requirements
Applicants must be at least 21 years of age and have been out of secondary school for at least two years.

For additional information contact
School of Part-time and Continuing Education
Admissions, Office of the Registrar
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-4120 ext. 3010

• Co-operative Education Programs
Co-operative education formally integrates the student's academic study with work experience in co-operating employer organizations. The usual plan is for the student to alternate periods of study with periods of work in appropriate fields of business, industry, government, social services and the professions. Progress on the job is monitored by the institution and is supervised and evaluated by both the employer and the institution.

Programs offered
Co-operative education programs are available in: agriculture (agriculture business, agriculture economics, animal and poultry science, applied microbiology, crop science, dairy science), applied chemistry, computing and information science, food science, microbiology.

Admission requirements and information
To be eligible for a co-operative education program a student must be registered as full-time, achieve at least 70% average (both overall and in major) in semesters 1 and 2, be a Canadian citizen or landed immigrant, and have an interview with a selection team.

Enrolment in the programs will be limited, and the number of students admitted is generally dependent on the employment market. Students will normally only be considered for admission to co-op at the semester 3 level.

For additional information contact
E.A. McCallum
Associate Director
Work Study Programs
Counselling and Student Resource Centre
University of Guelph
Guelph, Ontario N1G 2W1

Residence Fees 1983-84
Single students
For all but apartment-style residences
(2 semesters)
Single room $1 476
Dougle room $1 350

For apartment-style residences (2 semesters)
Single room $1 576
Double room $1 450

Married students (townhouse)
Furnished $336 per month
Unfurnished $325 per month

Meal plans (per semester)
Fall $500
Winter $520

Students accommodated in all but apartment-style residences are required to select one of the above meal plans. These plans are also available to students accommodated in apartment-style residences and to those living off campus. A semester, for room and board purposes, will terminate on the date announced for conclusion of examinations.

Tuition Fees 1983-84
(including incidental fees)
Full-time students per semester
Associate Diploma in Agriculture $242.25
Bachelor of Applied Science $617.25
Bachelor of Arts $599.25
Bachelor of Commerce $617.25
Bachelor of Landscape Architecture $624.25
Bachelor of Science $617.25
Bachelor of Science (Agriculture) $619.25
Bachelor of Science (Engineering) $669.25
Bachelor of Science (Human Kinetics) $617.25
Doctor of Veterinary Medicine
(1st term) $682.75
General Studies $599.25

Further Information
Admission inquiries should be directed to
Admissions
Office of the Registrar
University Centre, Level 3
University of Guelph
Guelph, Ontario N1G 2W1
Telephone 1-800-265-8344 (toll-free)

Information and application forms for student awards and loans may be obtained from
Awards
Office of the Registrar
University Centre, Level 3
University of Guelph
Guelph, Ontario N1G 2W1

Inquiries regarding university information programs for secondary schools should be directed to
Admissions
Office of the Registrar
University Centre, Level 3
University of Guelph
Guelph, Ontario N1G 2W1

Inquiries regarding campus visits for secondary school students should be directed to
Admissions
Office of the Registrar
University Centre, Level 3
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-4120
or 821-2130

Lakehead University

Thunder Bay

President: G.A. Harrower

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	2 881	117
Part-time	1 400	16?

Faculties, Schools and Institutes
Faculty of Arts
Faculty of Education
Faculty of Science
School of Business Administration
School of Engineering
School of Forestry
School of Library Technology
School of Nursing
School of Physical Education and Outdoor Recreation

General Admission Requirements
The standard for admission to a degree program at Lakehead University is the successful completion of any Ontario Grade 13 program (or equivalent) embracing at least three distinct subject areas, acceptable to the university as satisfying the entrance standards. The overall average must be at least 60%. In addition to obtaining this general level of academic maturity, the candidates will be required to include in their senior high school programs certain subjects required for specific majors. For example, Grade 13 English is required for a Bachelor of Arts program. These specific requirements are noted in the university's calendar.

Bachelor of Arts
Admission into the Bachelor of Arts program will require satisfactory completion of any Ontario Grade 13 program embracing at least three distinct subject areas. For example, English, geography and mathematics; or English, history and another language, etc. The overall average must be at least 60% and at least one Grade 13 English credit must be included in the program. Certain majors in the Faculty of Arts also require specific Grade 13 prerequisites, for example, mathematics and the languages.

Bachelor of Science
Admission into a Bachelor of Science degree program at Lakehead University will require satisfactory completion of any Ontario Grade 13 program embracing at least three distinct subject areas, preferably in the sciences, for example, mathematics, physics and chemistry. Some majors in the faculty do require certain Grade 13 prerequisites, for example, mathematics. Students considering a science program should include in their secondary school program a pattern of subjects consistent with their planned university majors.

Applicants to the general program will be eligible for admission consideration without normal Grade 13 science requirements.

Diploma programs
Admission to diploma programs is based upon successful completion of an Ontario Grade 12 program (or equivalent) which would allow the student to proceed to a full Ontario Grade 13 program. The overall average must be at least 60%. Certain diploma programs also require specific subjects at the Grades 11 and 12 levels for admission.

Applicants with high standing in general Grade 12 programs will be considered on an individual basis. All other applicants to diploma programs, with special circumstances, will be considered on an individual basis. Please note that Ontario students applying for admission to engineering technology programs out of Grade 13 will be considered for the second year of the program if they meet the subject and grade requirements. See the program listing in the Engineering and Applied Sciences section for exact requirements.

Special Consideration
An applicant who lacks a specific required subject for his or her planned program or major may be considered if the level of achievement in associated subjects is substantially better than average. Each student in this category is considered on an individual basis.

Extraordinary Admission
The university is prepared to consider applicants for admission who have been away from formal education for at least two years at any time. Applicants will likely be interviewed by an Admissions Committee representative, and may be required to provide evidence of their proficiency in English. Each case is considered on its own merits.

Admission to First Year University from Grade 13 (February)
Lakehead University offers courses in arts at first year university level from February to the end of April. The program allows completion of up to three full credits and students may continue with the spring session or summer school to complete the two remaining first year credits. This program was designed primarily to suit the needs of students graduating at the end of January from semestered high schools.

Admission to First Year University from Grade 12
The university is prepared to consider exceptional advanced level Grade 12 students who attain an average of 80% and are recommended by their principal or school counsellor for entrance to first year of an appropriate degree program. Applicants admitted to first year of science and/or engineering will normally be required to take a mathematics course during the summer session.

Admission to One University Course as a Special Student
The university is prepared to consider qualified students for admission to degree studies without the usual high school requirements. The basis of admission will be the student's performance in a suitable Lakehead University course, taken as a deferred credit, while the student is still in high school.

Early Admission
Ontario Grade 13 students who apply early and who have maintained at least third-class standing through Grades 11 and 12 and mid-term Grade 13 will be considered for early admission. All students who apply early will be advised before the end of their school year with regard to their admission status. Early admission consideration will also be extended to Grade 12 students who apply for admission to diploma programs.

Agricultural and Biological Sciences

- **Bachelor of Science**

Three-year general
Available in: biology, natural science.

- **Bachelor of Science**

Four-year honours
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

- **Bachelor of Arts – Bachelor of Education (combined)**
  Bachelor of Education
  Bachelor of Science – Bachelor of Education (combined)
  Master of Education

The following professional four-year degrees are offered for teachers: concurrent degree programs for arts or science and education are available for those who wish to teach at the primary-junior, junior-intermediate or intermediate-senior levels. The equivalent of one year of professional studies and practice will provide the basis of certification in all programs.

The following majors are available to BA-BEd candidates wishing to complete the primary-junior specialization: anthropology, English, French, history, philosophy, psychology, sociology.

The following majors are available to BA-BEd candidates wishing to complete the junior-intermediate specialization: English, geography, history, mathematics, philosophy, political studies, psychology.

The following majors are available to BA-BEd candidates wishing to complete the intermediate-senior specialization: English, French, geography, history, mathematics.

The following major is available to BSc-BEd candidates wishing to complete the primary-junior specialization: general science (biology concentration).

The following majors are available to BSc-BEd candidates wishing to complete the junior-intermediate specialization: general science (biology concetration), general science (chemistry concentration).

Lakehead University also offers a one-year Bachelor of Education degree program for holders of approved degrees qualifying the candidate for teaching at the primary-junior, junior-intermediate or intermediate-senior level.

Admission requirements
Admission requirements to the first year of a four-year BA-BEd or BSc-BEd program requires the satisfactory completion of a full Grade 13 program (or equivalent) with an overall average of at least 60%. In addition to the prerequisites for specified majors, for BA-BEd, Grade 13 English is required; for BSc-BEd Grade 13 program should include sciences.

- **Bachelor of Outdoor Recreation**

Four-year honours

Admission requirements
Complete Grade 13, including English, with a 60% overall average.

- **Bachelor of Physical and Health Education**

Four-year honours

Admission requirements
Grade 13 including English and chemistry. Applicants without Grade 13 chemistry will be considered on an individual basis and, if accepted, must take chemistry 1060 in lieu of one elective during their first year.

Engineering and Applied Sciences

- **Bachelor of Applied Science**

First year only

Admission requirements
Six Grade 13 credits including mathematics (three credits: functions and relations, calculus and algebra, or equivalent), chemistry and physics.

- **Bachelor of Engineering (Post-diploma)**

Two years

Admission requirements
Diploma in technology from a college of applied arts and technology, Ryerson Polytechnical Institute, Lakehead University or its equivalent. Preference will be given to applicants with experience in industry. Specialization in: chemical, civil, electrical and mechanical.

Please note that Grade 13 applicants who are eligible for entrance to the second year of engineering technology may continue at Lakehead, receiving an engineering degree after four successful years of study. Grade 12 applicants enter first year, receive a diploma after three years and may obtain an engineering degree after two further years of study.

- **Honors Bachelor of Science in Forestry**

Four-year honours

Admission requirements
Grade 13 including mathematics (relations and functions, and calculus) and chemistry. Algebra and biology are recommended. Entrance to this limited enrolment program may require a higher overall average.

- **Diploma in Engineering Technology**

Three years for Grade 12 graduates; two years for Grade 13 graduates with admission requirements.
Specialization in: chemical, civil, electrical, and mechanical engineering technology.

Admission requirements
Applicants must have standing in advanced Grade 11 and 12 mathematics and sciences. (Applicants with a full Grade 13 or equivalent will be admitted to second year of the technology program if they have achieved an overall average of 60% in six subjects and a minimum 60% in mathematics. The six subjects should include Grade 13 physics, chemistry, calculus, algebra, functions and relations, and one additional elective. Please note that Grade 13 applicants who are eligible for entrance to second year of the engineering technology program may continue at Lakehead University, receiving an engineering degree after four successful years of study. Students from Grade 12 enter first year, receive a diploma in technology after three years and may obtain an engineering degree after two further years of study.) See also "General Admission Requirements, Diploma programs".

- **Diploma in Forest Technology**

Two years

Admission requirements
Applicants must have standing in advanced level Grade 11 and 12 mathematics and sciences. Due to the program's limited enrolment status, an average of more than 60% may be required. See also "General Admission Requirements, Diploma programs".

- **Diploma in Mechanized Forest Operations**

Admission requirements
Applicants must have a diploma in forest technology with a minimum of 60% average (mature students with suitable experience will also be considered on an individual basis). See also "General Admission Requirements, Diploma programs".

Fine and Applied Arts

- **Bachelor of Arts**

Four-year honours
Available in: fine arts (majors in music, visual arts, English and dramatic studies).

Admission requirements
See "General Admission Requirements, Bachelor of Arts". Visual arts applicant must submit a portfolio for evaluation. Music students will be required to audition at registration.

General Arts and Science

- **Bachelor of Arts**

Three-year general
Available in: general program.

- **Bachelor of Science**

Three-year general
Available in: general program.

Health Professions and Medical Sciences

- **Bachelor of Science in Medical Laboratory Science**

Four-year honours

Admission requirements
The medical laboratory science program is a post-registered technologist's program and requires registered technologist's certification (RT). Standing in first year university mathematics and chemistry recommended.

- **Bachelor of Science in Nursing**

Four-year honours

Admission requirements
Grade 13 including chemistry, biology and English. Mathematics is strongly recommended.

Candidates who are Registered Nurses must:
a) meet the admission requirements specified for Grade 13 applicants; or
b) have mature student status (see calendar);
c) have evidence of registration to practice nursing in Canada;
d) have taken Grade 13 chemistry (or equivalent).

Registered Nurses admitted under the above criteria may write challenge examinations for a number of courses as specified in the calendar.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: English, English (concentration in Canadian studies), French, philosophy.

• Bachelor of Arts

Four-year honours
Available in: English, English and dramatic studies, English and French (combined), French, philosophy, philosophy and mathematics (combined).

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Diploma in Library Technology
Two years

Admission requirements
Admission is based on evidence of a general level of academic achievement to the Ontario advanced Grade 12 level.

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general
Available in: computer science, mathematics.

• Bachelor of Arts

Four-year honours
Available in: computer science, mathematics, mathematics (options in actuarial science, applied mathematics), mathematics and economics (combined), mathematics and philosophy (combined).

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: chemistry, chemistry with energy and fuel science, computer science, mathematics, physics, physics with energy and fuel science.

• Bachelor of Science

Four-year general
Available in: geology, geology with energy and fuel science.

• Bachelor of Science

Four-year honours
Available in: chemistry, chemistry with energy and fuel science, computer science, geology, geology with energy and fuel science, mathematical physics, mathematics (options in actuarial science, applied mathematics), physics, physics with energy and fuel science.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Administration

Three years
Majors are available in accountancy, management systems, marketing, personnel and labour relations.

Admission requirements
Complete Grade 13 program consisting of six credits including English. A credit in mathematics is recommended.

• Bachelor of Arts

Three-year general
Available in: anthropology, anthropology (Taiga studies), economics, geography, history, political studies, psychology, sociology.

• Bachelor of Arts

Four-year honours
Available in: anthropology, economics, economics (industrial relations), economics and mathematics (combined), geography, history, political studies, psychology, sociology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Commerce
Four-year honours

Admission requirements
Grade 13 including English, calculus and algebra (functions and relations or mathematics of finance can be used to substitute for one of the two).

• Bachelor of Science

Three-year general/four-year honours
Available in: geography, psychology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Residence Fees
Approximate 1983-84 costs, with meals
Single room $2 600
Double room $2 500

Tuition Fees 1983-84
Degree programs
The following fees do not include incidental fees or field trip costs.

Arts (including concurrent education and make-up year) $1 100
Arts (geography Honors Bachelor of Outdoor Recreation) $1 100
Applied science $1 195
Administration, commerce, social work $1 100
Degree engineering (years 4 and 5 only) $1 100
Degree forestry $1 100
Education degree, BEd (one-year program) $1 100
Nursing $1 100
Outdoor recreation $1 100
Physical and health education $1 100
Science (including concurrent education, medical laboratory science and make-up years) $1 100
Science (natural science Honors Bachelor of Outdoor Recreation) $1 100

Diploma programs
Mechanized forest operations (post-diploma) $1 100
Engineering technology, library technology $660
Forestry technology $660
Graduate business diploma (post-diploma) $1 100

Further Information
Inquiries about admission requirements should be directed to
Mrs. Gwen Wojda
Assistant Registrar, Admissions
Lakehead University
Thunder Bay, Ontario P7B 5E1
Telephone (807) 345-2121 ext. 527

Inquiries about admission requirements and secondary school liaison should be directed to
Mr. Randy Haber, Mr. Lyle Nicol or
Mr. Cam Symons, Secondary School
Liaison Officers
Lakehead University
Thunder Bay, Ontario P7B 5E1
Telephone (807) 345-2121 ext. 674, 749, 650

Information and application forms for student awards may be obtained from
Mr. K.W. Hearnden
Dean of Students
Lakehead University
Thunder Bay, Ontario P7B 5E1

Laurentian University

Sudbury

President: Henry B.M. Best

Enrolment 1982-83 (Sudbury Campus)

	Undergraduate	Graduate
Full-time	2 766	94
Part-time	2 294	89

Faculties, Schools and Institutes
Faculty of Humanities
Faculty of Professional Schools
Faculty of Science and Engineering
Faculty of Social Sciences
School of Commerce and Administration
School of Education
School of Engineering
School of Graduate Studies
School of Nursing
School of Physical and Health Education
School of Social Work
School of Translators and Interpreters

General Admission Requirements
Minimum of three subjects – six credits, with a 60% average at the Ontario Grade 13 level, or the equivalent. At least four of the six credits must be from languages, mathematics, sciences or social sciences. Applicants planning to concentrate in mathematics must have calculus and either algebra or functions and relations. The university also requires a complete academic report for the three final years of secondary school and a recommendation by the secondary school last attended regarding fitness for university studies. Petitions for variance from these requirements may be initiated with the Admissions Office.

Bachelor of Arts
Admission requirements for a Bachelor of Arts program are either English or French. A Bachelor of Arts degree may be obtained at either the general or specialized level. General programs includes 15 full courses over a three-year period (normally five courses each year). Concentrations (five full courses in one subject taken over three years), that are available are listed under specific subject areas. Specialized programs include 20 full courses (over a four-year period), at least nine of which will be upper-year level courses in the subject of concentration.

Bachelor of Science
Grade 13 requirements for admission into a Bachelor of Science program include: calculus, chemistry, plus two of biology, physics, geology and mathematics other than calculus. (Recommended subjects: chemistry, physics, two mathematics, and one other science credit.)* General and specialized degrees may be obtained in the same manner as a Bachelor of Arts degree. Concentrations available are listed under specific subject areas.

Early Admission
Early admission will be granted to students who have, in the opinion of the Admissions Committee for Laurentian, Algoma or Nipissing, a satisfactory academic background. This acceptance is conditional upon the satisfactory completion of Grade 13.

Ontario Grade 12
The university and colleges will consider the applications of exceptional Grade 12 students with an "A" average throughout secondary school. A personal biography, as well as a positive recommendation from the guidance counsellor and/or principal will be required. Before being recommended for admission the candidate will be interviewed.

Concurrent Grade 13 Students
Subject to certain conditions, Grade 13 students may take university courses concurrently with their secondary school program, but credit will not be granted for passed courses until the students meet the normal admission requirements. Such students may enrol for only one session at a time as special students, with their records to be reviewed at the end of each session. These students must have obtained at least a "B" standing (depending on course load) and have the support of their guidance counsellor and/or school principal.

Mature Students
Persons 21 years of age or older as of October 1 of the current academic year, who have been away from formal education for a period of at least one year and who lack the formal entrance requirements, but whose previous school performance and recent work record suggest a strong possibility of academic success, may qualify for admission as mature students to the BA, BSW, BCom programs (or others with special permission). Candidates who have completed Ontario Grade 12, who have been in the work force for at least two years and who have demonstrated a suitability for university study, may also qualify without satisfying the age requirement.

Candidates who have completed three Grade 13 credits with a 60% average may also qualify if they are 21 years of age as of October 1 of the current academic year and if they have been away from formal education for at least one year; or, if they have not reached the age of 21 by October 1 but have been away from formal education for at least two years.

Agricultural and Biological Sciences

• Bachelor of Science

Three-year general
Available in: biology.

• Bachelor of Science

Four-year specialized
Available in: biochemistry, biology, biology and chemistry (combined).

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Education
The School of Education offers the following: a three-year program leading to a Bachelor of Arts with a concentration in education, after which a fourth year may be taken to qualify for a Bachelor of Education degree and an Ontario Teacher's Certificate (BEO); a one-year program leading to a Bachelor of Education degree and a BEO for candidates who have a baccalaureate other than a Bachelor of Arts with a concentration in education; and a one-year program leading to the certification of French-speaking teachers for the French language classes in Ontario schools for candidates who have completed year one of an undergraduate university program, or its equivalent, including at least one course in français. This program will be discontinued as of September 1984.

Admission requirements
Français, and English or anglais.

• Bachelor of Physical and Health Education

Four-year honours
A four-year program with a curriculum designed to provide a sound background in physical and health education.

Admission requirements
English or French.

Engineering and Applied Sciences

• Bachelor of Engineering
The School of Engineering offers four-year Bachelor of Engineering programs in mining and in extractive metallurgy, and the first two years of chemical, civil, and mechanical engineering.

Admission requirements
Mathematics (calculus), mathematics (functions and relations), mathematics (algebra),* chemistry, physics.

Fine and Applied Arts

• Bachelor of Arts

Three-year general
Available in: music, theatre arts.

Four-year specialized
Available in: music.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

General Arts and Science

• Bachelor of Liberal Science
This program requires fifteen courses including general science, non-science, and elective credits. Considerable flexibility exists so that various emphases or themes can be incorporated in programs in order to accommodate different student needs.

Admission requirements
English or français.

Health Professions and Medical Sciences

• Bachelor of Science in Nursing
A four-year program preparing the graduate to practice in all health care facilities including hospitals, clinics, public health agencies, family practice units and as nurses in industry. As well, graduates are able to participate in research and may go on to study for master's and doctoral degrees.

Admission requirements
English or français, chemistry and biology.

*Petitions for variance may be initiated with the Admissions Office.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: English, français, French, French language and civilization, German, Italian, linguistics, philosophy, religious studies, Russian, Spanish.

• Bachelor of Arts

Four-year specialized
Available in: English, français, philosophy, religious studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science in Language
A four-year program which is primarily concerned with the training for posts in Canada; students will be equipped for positions involving the use of languages with the Public Service, industry and commerce, bilingual agencies and business, and the mass media.

Admission requirements
English (minimum average 66%) and French or français (minimum average 66%).

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general
Available in: mathematics, computer science.

Four-year specialized
Earth science.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: chemistry, geology, mathematics, mathematics and computer science, applied physics.

• Bachelor of Science

Four-year specialized
Available in: chemistry, chemistry and biology (combined), chemistry and geology (combined), chemistry and physics (combined), geology, mathematics, mining geology, applied physics, physics and geology (combined).

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general
Available in: anthropology, Canadian studies (interdisciplinary program), economics, education, geography, history, law and justice, Native studies, political science, psychology, sociology, studies on the co-operative movement (in French).

• Bachelor of Arts

Four-year specialized
Available in: economics, geography, history, political science, psychology, sociology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Commerce

Four-year honours
Four years of study, 20 full courses. An honours Bachelor of Commerce in sports administration is an interdisciplinary program offered jointly by the School of Commerce and Administration and the School of Physical and Health Education.

*Admission requirements**
English or français and two Grade 13 level mathematics courses.

• Bachelor of Social Work

Four-year honours
A four-year program with the study of social work beginning in the first year.

Admission requirements
Grade 13 English or French.

Residence 1983-84
Single room $1 170 – $1 200
Double room $980 – $1 000
Apartments for married students $229 per month.
Meals are available on a cash basis or a meal card may be purchased.

Tuition Fees 1983-84
(including incidental fees)
Canadian citizens and exempt visa students
Full-time students:
All programs except engineering $1 222.50
Engineering $1 317.50

Further Information
Information and application forms for student awards may be obtained from
Denis Lauzon
Director of Student Affairs/Awards
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151
1-800-461-4030 (toll-free)

Inquiries about admission requirements and requests for more general information should be directed to
Matthew Brennan
Assistant Registrar, Admissions
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 302
1-800-461-4030 (toll-free)

Requests for general information should be directed to
Liaison Officers
Laurentian Univeristy
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 223
1-800-461-4030 (toll-free)

*Petitions for variance may be initiated with the Admissions Office.

Algoma University College Sault Ste. Marie

Dean of the College: R.G. Ewing
Algoma University College is a non-sectarian liberal arts college in affiliation with Laurentian University.

The Algoma Conservatory of Music, established in 1971 and located on the campus, offers private lessons in piano, organ, brass, strings, guitar, flute, speech arts, voice and in theoretical subjects. Many students follow the Royal Conservatory program leading to the ARCT or Teacher's Diploma. Students may enrol in the three year Bachelor of Arts (Music) degree program at Algoma with courses in piano, organ, brass, strings, voice, theory and history. Through co-operative arrangements, students may enrol in the Bachelor of Arts (Honours) Music program at the University of Guelph with instruction in the first two years at Algoma University College.

The university college provides fully-integrated, full- and part-time study programs in arts and humanities, physical and biological sciences, and social sciences, in both day and evening classes. In addition, instruction in outlying communities supplement the regular fall/winter academic sessions.

The library, housed in a new wing built in 1973, is open to all persons in the general community and contains 60 093 volumes, 7 659 government documents titles and 591 periodical subscriptions.

In the intimate academic atmosphere, students of all ages enjoy the direct personal contact with their instructors that only a small university college can provide.

Enrolment 1982-83

Full-time	190
Part-time	540

Admission Requirements
Same as for Laurentian University, Sudbury. The Bachelor of Arts (Music) requires Grade VIII performance and Grade II theory or their equivalents.

Degree Programs Offered
Degree programs require the completion of the equivalent of 15 full courses. For full-time students this normally requires three years of study. Specialized programs require the completion of the equivalent of 20 full courses. For full-time students this normally requires four years of study.

• Bachelor of Arts general program
Concentrations (majors) are available in: accounting, Canadian studies, economics, English, French, geography, history, mathematics, music, philosophy, political science, psychology, sociology.

Continuations (minors) are also available in: anthropology, commerce, Italian, social welfare, Spanish, visual arts.

Partial Degree Programs Offered

• Bachelor of Science general program
(Laurentian University, Sudbury)
Only the first year of the program is available at Algoma University College. Students must transfer after one year to continue in a science program.

• Bachelor of Arts specialized program
(Laurentian University, Sudbury)
A limited range of programs leading to the Bachelor of Arts and the Honours Bachelor of Arts degree is available. Part-time students may complete the degree requirements to the end of second or third year in most subject areas where the Bachelor of Arts General Program is available. Full-time students may complete degree requirements to the end of the second or third year in economics, English, psychology and sociology. Students who maintain the requisite grades may transfer to Laurentian University to complete these programs.

• Bachelor of Science specialized program
(Laurentian University, Sudbury)
The first year of this program is the same as that of the corresponding general program. Specialized programs in science are not offered at Algoma University College; however, students with good grades in a first year program at Algoma may apply for transfer to a specialized program at Laurentian or any other university.

• Honours Bachelor of Commerce
(Laurentian University, Sudbury)
The courses required for the first two years of the program are available at Algoma. Students with good grades may apply for admission to the third year of the Honours Bachelor of Commerce program at Laurentian or any other university.

• Honours Bachelor of Social Work
(Laurentian University, Sudbury)
The courses required for the first two years of the program are available at Algoma. Students with good grades may apply for admission to the third year of the Honours Bachelor of Social Work program at Laurentian or any other university.

• Part-time Studies
Students pursuing degrees through part-time studies have the same opportunities for the same courses and programs and are subject to the same course and program requirements as full-time students. There are minor differences in admissions policy and registration procedures. Contact the registrar for further information.

Scholarships and Financial Assistance
The college offers entrance and continuing scholarships for full-time students and has a bursary program for part-time students.

Tuition Fees 1983-84
(including incidental fees)
All programs $1 092.50

Further Information
Information regarding entrance requirements and academic programs may be obtained from
Office of the Registrar
Algoma University College
1520 Queen St. E.
Sault Ste. Marie, Ontario P6A 2G4
Telephone (705) 949-2301

Information on other aspects of the university college and its services may be obtained from
Information Officer
Algoma University College
1520 Queen St. E.
Sault Ste. Marie, Ontario P6A 2G4
Telephone (705) 949-2301

Le Collège Universitaire de Hearst

For information concerning the programs offered at Le Collège Universitaire de Hearst, please consult *Tour d'horizon*, the French equivalent of this publication.

Nipissing University College North Bay

President: George J. Zytaruk

Enrolment 1982-83

Full-time	414
Part-time	2 445

Faculties
Faculty of Arts
Faculty of Education

General Admission Requirements
Same as for Laurentian University, Sudbury.

Degree Programs Offered

• Bachelor of Arts
Nipissing offers a three-year Bachelor of Arts general program for full-time and part-time students. It consists of 15 courses including five in the area of concentration and three in an area of continuation. No more than eight first-year courses may be contained in the full program. Concentrations are offered in English, environmental geography, geography, history, psychology, and sociology. Continuations (minors) regularly offered are: classics, commerce, English, French, geography, history, mathematics, philosophy, psychology, sociology. Other areas in which electives are regularly offered are: biology, chemistry, commerce, computer science, economics, fine arts/music, fine arts/visual arts, français, geology, physical education, physics, political science, social welfare. A Bachelor of Arts specialized program in English is also offered.

Admission requirements
English or français.

• Bachelor of Education
The Faculty of Education at Nipissing offers a one-year program leading to a Bachelor of Education degree. This program prepares candidates for teaching in the elementary schools of Ontario and meets the Ministry of Education requirements for teacher certification.

Admission requirements
An approved university degree.

• Transfer Programs Offered
Nipissing offers the first year of the Bachelor of Science program and the first two years of the Bachelor of Social Work and the Bachelor of Commerce programs. Students in these transfer programs may complete one or two years at Nipissing and then transfer to Laurentian or to another university to complete the degree.

Admission requirements
Bachelor of Science – calculus, chemistry, and two of biology, geology, physics or mathematics.
Bachelor of Social Work – English or français.
Bachelor of Commerce – English or français, and two credits in mathematics.

Residence
The student residence, which accommodates 300 students, is built as 50 apartments in the style of townhouses. Each furnished townhouse accommodates six people. Students have their own bedroom and built-in study area. The fully equipped kitchen, dining room and living room are shared.

Residence fees 1983-84: arts, commerce, science, social work, education $1 184.

Tuition Fees 1983-84
(including incidental fees)
Full-time arts, commerce, science and social work $1 120
Full-time education $1 130

Further Information
Information regarding entrance requirements, academic status and scholarships and accomodation may be obtained from
The Registrar
Nipissing University College
P.O. Box 5002
Gormanville Road
North Bay, Ontario P1B 8L7
Telephone (705) 474-3450

Inquiries about financial assistance should be sent to
The Financial Aid Officer
Nipissing University College
P.O. Box 5002
Gormanville Road
North Bay, Ontario P1B 8L7
Telephone (705) 474-3450

McMaster University

Hamilton

President: Dr. Alvin A. Lee

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	9 953	1 172
Part-time	2 873	856

Academic Units
Faculty of Business
Faculty of Engineering
Faculty of Health Sciences
Faculty of Humanities
Faculty of Science
Faculty of Social Sciences
Arts and Science Program
McMaster Divinity College (affiliated)
School of Adult Education
School of Graduate Studies
School of Medicine
School of Nursing
School of Physical Education and Athletics
School of Social Work

General Admission Requirements
Grade 12 requirements
Physical education 1 and social sciences 1 require mathematics at least to the end of Grade 12; however, applicants who have not been able to comply with this requirement will be considered and should write to the Assistant Registrar (Admissions).

Grade 13 requirements
Applicants for admission must have standing satisfactory to the university in the appropriate area requirements, together with any additional work sufficient to qualify the applicant for the Ontario Secondary School Honour Graduation Diploma.

All potential applicants are strongly advised to take a senior high school course in English designed to improve their basic reading and writing abilities. Applicants to business 1, humanities 1, and music 1 must have Grade 13 English for admission.

Grade 13 Requirements for Specific Fields of Study
McMaster is aware of the variety of experimental programs offered in Ontario secondary schools and welcomes applicants from these programs. Although it may not be possible for all applicants to meet exactly the subject requirements outlined below, students are urged to write the Associate Registrar (Admissions) who will ensure that their case is given careful consideration.

Humanities 1, natural sciences 1 and social sciences 1 are broad fields of study in first year which lead to a variety of honours and pass programs in the second year. Arts and science 1, business 1, engineering 1, music 1, nursing 1 and physical education 1 are the first year programs leading to the Bachelor of Arts and Science, Bachelor of Commerce/Bachelor of Commerce (Honours), Bachelor of Engineering, Bachelor of Engineering and Management, Bachelor of Music, Bachelor of Science in Nursing and Bachelor of Physical Education, respectively.

Note: Arts and science 1, business 1, engineering 1, music 1, natural science 1, physical education 1 and nursing 1 have limited enrolment. Admission to these programs is by selection; therefore, the minimum requirements will not guarantee admission.

Area Requirements
Humanities 1:
English and a language other than English. Those applicants who lack a Grade 13 language other than English may be accepted for admission on the understanding that they include a language other than English in their first year program. The level of the language course to be taken will be determined by the applicant's background in that subject.

Students intending to take art 1A6 or 1D6 must submit to the Chairman of the Department of Art and Art History a portfolio to show their interest and ability.

Natural sciences 1:
An applicant from an Ontario secondary school is required to attain a weighted average of at least 60% in six Grade 13 credits and satisfy the following requirements: one Grade 13 credit in calculus, one Grade 13 credit in physics or a second mathematics, plus one Grade 13 credit from biology, chemistry or mathematics, with a weighted average of at least 60% in these three credits.

Admission to natural sciences 1 is by selection. Students with weighted Grade 13 averages of 70% or better have a good chance of success in science programs and will be given priority.

It is also strongly recommended that applicants who intend to proceed to programs in applied chemistry, applied mathematics, applied physics, biochemistry, chemistry, geology, mathematics, metallurgy or physics present additional Grade 13 mathematics credits. It is recommended that students who intend to proceed to a program in biology include Grade 13 biology. It is strongly recommended that students present at least one of Grade 13 biology, chemistry, or physics when meeting the above requirements. Additional mathematics (algebra and/or relations and functions) and a senior level English course are also desirable.

Social sciences 1:
There are no specific Grade 13 credits required for admission to social sciences. Mathematics at least through Grade 12 is required, although applicants who are not able to comply will be considered.

Applicants who might be interested in concentrating in economics, psychology or geography are strongly advised to include mathematics in their Grade 13 programs.

Early Admission
Subject to satisfactory completion of Grade 13, early admission will be granted to selected applicants who are completing or have completed the Grade 13 credits for admission to a given first year.

Admission From Grade 12 (Ontario)
McMaster University invites applications from students who will have completed the requirements for a Secondary School Graduation Diploma and who have met the following conditions. Applicants must have successfully completed Grade 12 with an average of at least 80% and two Grade 13 credits appropriate to the year 1 program they wish to enter (e.g. calculus and physics for natural sciences 1). These academic requirements must have been fulfilled by June of the year in which admission is sought, and within four years of the student first enrolling in secondary school. In these credits, they must have had averages of at least 80%. Admission is by selection, so candidates may be interviewed and should not assume that the satisfying of these requirements guarantees admission.

Agricultural and Biological Sciences

• Bachelor of Science

Three-year general
Available in: biology.

• Bachelor of Science

Four-year honours
Available in: biochemistry, biochemistry and chemistry (combined), biology, biology and geology (combined), biology and philosophy (combined), biology and psychology-life sciences (combined).

• Bachelor of Science

Four-year major
Available in: biochemistry, biology.

Admission requirements
See "General Admission Requirements" and "Area Requirements (Natural sciences 1)".

Education/Physical Education/Recreation

• Bachelor of Physical Education
Four years

Admission requirements (physical education 1)
There are no specific Grade 13 subject areas which are required for admission to physical education 1, although it is recommended that one or two of the following sciences be included in Grade 13: biology, chemistry, physics. Mathematics at least through Grade 12 is required, although applicants who are not able to comply will be considered.

Engineering and Applied Sciences

• Bachelor of Engineering

Four years
Available in: ceramic, chemical, civil, computer, electrical, manufacturing, mechanical, and metallurgical engineering, engineering physics.

• Bachelor of Engineering and Management

Five years
Available in: combinations with chemical, civil, computer, electrical, and mechanical engineering, engineering physics.

Admission requirements (engineering 1)
To be considered for admission to engineering 1, Ontario secondary school applicants must meet the following minimum requirements:
1) overall weighted average of more than 70% in six credits offered for the Secondary School Honour Graduation Diploma;
2) weighted average of more than 70% in the following five credits: Grade 13 calculus, algebra, functions and relations, chemistry and physics (students in this group take the engineering 1 program). Students offering only four of the five area subject requirements (including calculus) with high standing, will be considered. (Students in this group take an adapted engineering 1 program to be determined in consultation with the Associate Dean of Engineering.)

The Faculty strongly recommends that potential applicants take a senior high school course in English designed to improve their basic reading and writing abilities.

Enrolment in engineering 1 is limited and admission is by selection. Experience indicates that

students with weighted Grade 13 averages of 80% or greater have a good chance of success in engineering programs. Students with a standing lower than 80% who nevertheless provide evidence of unusual promise will also be considered.

• Bachelor of Science

Three-year general
Available in: computer science

Four-year honours
Available in: applied chemistry, computer science and mathematics (combined), applied mathematics and theoretical physics (combined), applied physics, applied statistics and computation (combined), computer science.

• Bachelor of Science

Four-year major
Available in: computer science, computer science and mathematics (combined), applied statistics and computation (combined).

Admission requirements
See "General Admission Requirements" and "Area Requirements (Natural sciences 1)".

Fine and Applied Arts

• Bachelor of Arts

Three-year general four-year honours
Available in: art, art history, dramatic arts, music.

Admission requirements
See "General Admission Requirements" and "Area Requirements (Humanities 1)".

• Bachelor of Music

Four-year honours
Available in: history and theory of music, music and another subject (combined), music education.

Admission requirements (music 1)
Students interested in registering in the music program will need to:
a) complete six Grade 13 credits with an overall weighted average of 60% (English and a language other than English to be included in these six credits), and
b) satisfy the audition requirement which consists of:
1) performance of two or three varied pieces of the candidate's choice, including one from the 20th century (required standard at least Grade 9.);
2) ear tests;
3) written examination on rudiments of theory (Grade 2 level);
4) interview; and
5) demonstration of basic keyboard skills including scales, chords, harmonization of a simple melody for non-keyboard performers. (Those applicants unable to meet minimum musical standards may be admitted and will be expected to register in a basic keyboard skills course.)

Students who lack a Grade 13 language other than English will be admitted on the understanding that they include a language other than English in first year. The level of the language course to be taken will be determined by the applicant's background in that subject.

General Arts and Science

• Bachelor of Arts and Science
Three-year and four-year honours

Admission requirements (arts and science 1)
To be considered for admission from Ontario Grade 13, candidates normally should have:
1) a weighted average of at least 75% in six Grade 13 credits, and
2) standing in Grade 13 English, and
3) standing in at least one Grade 13 mathematics.

Candidates without these qualifications who nevertheless provide evidence of unusual promise will also be considered. Students from colleges, other universities and other provinces, are invited to apply. Each case will be considered on its own merits.

• Bachelor of Science – general
Three-year general

Health Professions and Medical Sciences

• Bachelor of Health Sciences
Fourth year level post-professional degree program, available on both a full- and part-time basis. Available in: occupational therapy, physiotherapy.

Admission requirements
For admission to the degree program (fourth year), students must have successfully completed the three-year program in occupational therapy or physiotherapy at Mohawk College. To be eligible for consideration, graduates from these Mohawk programs should present:
1) a Mohawk diploma of occupational therapy or physiotherapy, and
2) a certificate from McMaster University, and
3) a letter outlining the candidate's learning objectives. (Guidelines are available).
4) all other transcripts from other post-secondary institutions attended.
5) a personal interview may be required.

Candidates with diplomas in occupational therapy and physiotherapy from other institutions are admitted to the degree program after successful completion of a preprogram phase as a continuing student. Candidates for admission should present:
1) Diploma of Occupational Therapy and/or Physiotherapy (including transcript), and
2) eligibility to practise in the jurisdiction which provided the professional training, and
3) Canadian citizenship or land-immigrant status, and
4) a letter outlining the candidate's learning objectives.

As places in the Bachelor of Health Science program are limited, admission is by selection of applicants. Possession of the published minimum requirements does not guarantee admission. Students who do not meet these requirements exactly, but who wish to be considered, should write to the Assistant Registrar (Health Sciences).

• Bachelor of Science in Nursing
Four years

Admission requirements (nursing 1)
Grade 12 mathematics and Grade 13 chemistry, plus two additional Grade 13 credits chosen from biology, English, another language, mathematics and physics.

As places in first year nursing are limited, admission is by selection. To qualify for consideration, applicants from various academic backgrounds are expected to have qualifications equivalent to the requirements outlined. Mature students, diploma Registered Nurses and students who do not meet these requirements are invited to write to the Assistant Registrar (Health Sciences).

• Doctor of Medicine
Three-year program leading to MD. Open to those with at least three years of university and a minimum "B" average.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: English, French, German, humanities, Italian, Latin, philosophy, religious studies*, Russian, Slavic studies, Spanish.

• Bachelor of Arts

Four-year honours
Available in: classics, English, French, German, Greek, Italian, Latin, philosophy, philosophy and biology (combined), philosophy and mathematics (combined), religious studies*, Russian, Russian and political science (combined), Slavic studies.

Admission requirements
For all programs except religious studies, see "General Admission Requirements" and "Area Requirements (Humanities 1)".

Mathematical and Physical Sciences

• Bachelor of Science

Three-year general
Available in: chemistry, computer science, geology, mathematics, physics.

• Bachelor of Science

Four-year honours
Available in: chemistry, chemistry and biochemistry (combined), chemistry and geology (combined), chemistry and physics (combined), computation and applied statistics (combined), computer science, computer science and mathematics (combined), geology, geology and biology (combined), geology and geography (combined), geology and physics (combined), mathematical sciences, mathematics, metallurgy and materials science, physics, statistics, theoretical physics and applied mathematics (combined).

• Bachelor of Science

Four-year major
Available in: chemistry, computation and applied statistics (combined), computer science, computer science and mathematics (combined), geology, geology and physics (combined), mathematical sciences, mathematics, metallurgy and materials science, physics (general, and health and radiation physics options).

Admission requirements
See "General Admission Requirements" and "Area Requirements (Natural sciences 1)".

*For the purposes of McMaster University, this course falls under the Social Sciences heading. See "General Admission Requirements" and "Area Requirements (Social sciences 1)" for admission requirements.

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general
Available in: anthropology, classical studies*, economics, geography, history*, labour studies, political science, psychology, sociology.

• Bachelor of Arts

Four-year honours
Available in: Anthropology, Canadian studies, Canadian studies and economics and computer science (combined), classical civilization, economics, economics and geography (combined), economics and mathematics (combined), economics and political science (combined), geography, geography and geology (combined), history, history and economics (combined), political science, political science and another subject (combined), political science and Russian (combined), psychology, psychology and biology-life sciences (combined), sociology.

Admission requirements
For all programs except those listed with a dagger, see "General Admission Requirements" and "Area Requirements (Social sciences 1)".

• Bachelor of Commerce
Four-year, four-year honours

Admission requirements (business 1)
Six Grade 13 credits are required, including one credit in mathematics (preferably calculus) and one credit in English.

Since business 1 enrolment is limited, the minimum overall average of 66% will not guarantee admission; an average of approximately 70% will probably be required.

• Bachelor of Science

Three-year general
Available in: geography, psychology.

• Bachelor of Science

Four-year honours
Available in: geography, geography and geology (combined), psychology, psychology and biology-life sciences (combined).

Admission requirements
See "General Admission Requirements" and "Area Requirements (Natural sciences 1)".

• Bachelor of Social Work/Bachelor of Arts
Four years

Admission requirements
Admission to the School of Social Work is contingent upon the completion of any year 1 program. Courses selected in year 1 should be appropriate for the subject of concentration selected for the BA program in year 2.

Residence Fees 1983-84
Room plus lunch and dinner five days a week $2 185
Room only $1 140
Meal plan only $1 045
Accommodation is available for 2 339 women and men. The rooms are provided with staple articles of furniture: tables, chairs, beds, mattresses, pillows and all necessary bedding. Residence students are required to supply their own wash cloths and towels.

The services of the infirmary, staffed by qualified doctors and nurses, are available to all resident students.

Tuition Fees 1983-84
(including incidental fees)
Arts and science $1 206
Commerce $1 206
Engineering $1 306
Humanities and social sciences $1 206
Medicine (three-term year) $2 178
Music $1 206
Nursing $1 206
Occupational therapy/physiotherapy $1 206
Physical education $1 206
Science $1 206
Social work $1 206

Tuition fees for students on student visas (including incidentals)
Commerce, science, humanities, social sciences $3 780
Engineering, music, nursing $6 160
Medicine $9 315

Further Information
Information about admission requirements may be obtained from
Associate Registrar (Admissions and Awards)
Room 120, Gilmour Hall
McMaster University
Hamilton, Ontario L8S 4L8
Telephone (416) 525-9140 ext. 4796

General information about the university may be obtained from
Division of Student Liaison
Room 102, Gilmour Hall
McMaster University
Hamilton, Ontario L8S 4L8
Telephone 525-9140 ext. 4787
Outside the Hamilton area, call 1-800-263-2150 (toll-free)

Information about scholarships may be obtained from
Academic Awards Officer
Room 113, Gilmour Hall
McMaster University
Hamilton, Ontario L8S 4L8
Telephone (416) 525-9140 ext. 4789

Information and application forms for financial assistance may be obtained from
Director of Student Financial Aid
Room 229, Divinity College
McMaster University
Hamilton, Ontario L8S 4K1
Telephone (416) 525-9140 ext. 4381

* For the purposes of McMaster University, this course falls under the Humanities heading (See "General Admission Requirements" and "Area Requirements (Humanities 1)" for admission requirements.

University of Ottawa

Ottawa

Rector: Roger Guindon, o.m.i.

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	10 767	1 309
Part-time	6 179	1 506

Faculties, Schools and Institutes
Faculty of Administration
Faculty of Arts
Faculty of Education
Faculty of Health Sciences – (School of Human Kinetics, School of Medicine, School of Nursing)
Faculty of Law
Faculty of Medicine
Faculty of Science and Engineering
Faculty of Social Sciences
School of Graduate Studies
Institute for International Development and Co-operation

Federated University and Affiliated College
Saint Paul's University, Ottawa

General Admission Requirements
Bachelor of Arts
Grade 13 requirements for admission to a Bachelor of Arts program include: one Grade 13 credit in English or français with an overall average of 60%.

Bachelor of Science
Grade 13 requirements for admission to a Bachelor of Science program include: Grade 13 credits in chemistry and physics plus two credits from calculus, algebra, or functions and relations. All three mathematics and both physics and chemistry are recommended. A minimum average of 60% in science and mathematics subjects as well as an overall average of 60% are required.

Note: an applicant presenting a credit in only chemistry or physics may be admitted. This applicant must take a make-up course during the first year.

Admission from Ontario Grade 12
Faculty of Administration
English – one credit; three other Grade 12 credits plus two Grade 13 credits from: functions and relations, calculus or algebra. An overall average of 80% on final marks is required. The Grade 12 candidate may be admitted to the first year of the Faculty of Administration. Enrolment is limited.

Faculty of Arts
English – one credit; five other credits. An overall average of 80% on final marks. The Grade 12 candidate may be admitted to the first year of the Faculty of Arts. The student who wishes to be admitted to the Bachelor of Music program, must also pass an audition and a written exam. Enrolment is limited.

Faculty of Science and Engineering
Pre-science year:
English – one credit; mathematics – one credit; science (physics 300 and chemistry 400) – one credit each, and three other credits for a total of six credits at the Grade 12 level, an average of

65% in science-mathematics, and an overall average of 65%.

Faculty of Social Sciences
English – one credit; five other credits; an overall average of 80% on final marks. The Grade 12 candidate may be admitted to the first year of the Faculty of Social Sciences. Enrolment is limited.

Agricultural and Biological Sciences

- **Bachelor of Science**

Three-year general
Available in: life sciences.

- **Bachelor of Science**

Three-year major/four-year honours
Available in: biochemistry, biochemistry (nutrition and dietetics), biology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

- **Bachelor of Education**

One year program, leading to elementary or secondary school teaching.

Admission requirements
A recognized bachelor's degree.

- **Bachelor of Physical Education**

Four-year honours

Admission requirements
Minimum overall average of 60% with one credit in English, and five other credits. Limited enrolment program.

- **Bachelor of Science in Kinanthropology**

Four-year honours

Admission requirements
Minimum overall average of 60% in Grade 13 with one credit in each of English, mathematics (algebra or calculus, or functions and relations) chemistry and physics.

Note: Preference will be given to applicants holding more than one credit in mathematics and in science.

- **Bachelor of Social Sciences with Honours in Recreology**

Four years

Admission requirements
Minimum overall average of 60% in six Grade 13 credits.

Engineering and Applied Sciences

- **Bachelor of Applied Science**

Four years
Available in: electrical, chemical, civil and mechanical engineering.

- **Bachelor of Applied Science (Co-operative Program)**

Four and one-half years
Available in: electrical, chemical, civil and mechanical engineering.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

- **Bachelor of Applied Science (Engineering Management Program)**

Five years

Admission requirements
See "General Admission Requirements, Bachelor of Science".

- **Bachelor of Science**

Three-year general
Available in: earth sciences.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Fine and Applied Arts

- **Bachelor of Arts**

Three-year concentration
Available in: music, theatre, visual arts.

- **Bachelor of Arts**

Four-year honours
Available in: music, theatre, theory and history of art.

- **Bachelor of Fine Arts**

Four-year honours
Available in: photography and studio.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

- **Bachelor of Music**

Four-year honours
Available in: composition, education, musicology, performance, theory.

Admission requirements
An overall Grade 13 average of at least 60% with one credit in English, and five other credits. Candidates must also pass an audition and a written exam.

Health Professions and Medical Sciences

- **Bachelor of Science in Nursing**

Four-year honours

Admission requirements
Grade 13 credits in English, biology, chemistry, and three other credits. Grade 12 mathematics is also required. An average of 65% is required in the science courses; minimum overall agverage of 60%. Limited enrolment program.

- **Doctor of Medicine**

Candidates in the following categories are eligible to apply for admission to the first year of the four-year MD program:
a) students who have successfully completed the first two years of a BSc program, provided it includes at least one year of physics, one year of general and inorganic chemistry, one year of general biology or zoology, and one year of organic chemistry;
b) students of other universities who have completed studies equivalent to those listed in (a), provided such studies comply with the regulations of the College of Physicians and Surgeons of Ontario.

Humanities and Related Courses

- **Bachelor of Arts**

Three-year concentration
Available in: classical studies, communication, English, German, history of religions, Italian, lettres françaises, linguistics, philosophy, religious studies, Slavic studies, Spanish.

- **Bachelor of Arts**

Four-year honours
Available in: communication, English, lettres françaises, linguistics, philosophy, religious studies, Spanish, translation.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

- **Bachelor of Arts**

Three-year general/four-year honours
Available in: mathematics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

- **Bachelor of Science**

Three-year general
Available in: physical sciences.

- **Bachelor of Science**

Three-year major/four-year honours
Available in: chemistry, computer science, geology, mathematics, mathematics – science, physics, physics and mathematics (combined).

- **Bachelor of Science in Mathematics – Science**

Five-year co-operative program
Available in: applied mathematics and computing, statistics and computing.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

- **Bachelor of Administration**

Three years

- **Bachelor of Commerce**

Four-year honours
Specializations available in: accounting, management and information systems. Majors available in: finance, human resources management, management science, marketing, public policy and public management.

Admission requirements
Grade 13 with one credit in English, two credits from functions and relations, calculus, or algebra, and three other credits. Minimum overall average of 65%.

Note: The BAdm and BCom programs are given by the Faculty of Administration.

- **Bachelor of Arts**

Three-year concentration
Available in: classical art and archaeology, classical studies, economics, geography, history, medieval studies, political science, Slavic stud-

ies, sociology, Canadian studies, women's studies.

• Bachelor of Arts

Four-year honours
Available in: classical studies, geography, history, Slavic studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Arts in Psychology

Three-year concentration four-year honours
Given through the Faculty of Social Sciences.

Admission requirements
One credit in English plus five other credits. Minimum overall average of 60%.

• Bachelor of Laws
(Common Law section of the Faculty of Law)
Three years following a minimum of two years of a recognized bachelor's program beyond Ontario Grade 13.

• Licence en Droit
(Section de Droit civil de la Faculté de Droit)
Trois années après le baccalauréat ès arts ou l'obtention d'un diplôme jugé équivalent.

• Bachelor of Laws – Licence en Droit (combined)
A common content of Canadian law subjects makes it possible to combine both programs, enabling students to obtain both degrees in four years.

• Bachelor of Social Sciences

Three years with one or two concentrations
Available in: economics, political science, psychology, sociology, and criminology.

• Bachelor of Social Sciences

Four-year honours
Available in: economics, political science, psychology, recreology, and sociology.

Admission requirements
Minimum overall average of 60% in six Grade 13 credits. The student who wishes to study economics must present two credits from functions and relations, calculus, or algebra. The student who wishes to study psychology must present a credit in English.

Note: The Faculty of Social Sciences offers a joint program with honours in economics, political science, recreology, sociology, psychology and a concentration in one of the following disciplines: classical art and archaeology, classical studies, economics, English, geography, history, history of religions, lettres françaises, linguistics, mathematics, medieval studies, philosophy, political science, psychology, public administration, religious studies, Slavic studies, sociology, Spanish.

Residence 1983-84
Academic year
Single room $1 420
Double room $1 108
The student residences on campus are Marchand Hall (343 men and women), Stanton Hall (357 men and women), Leblanc Hall (109 men and women) and Thompson Hall (459 men and women).

Scholarships and Financial Assistance
Students in financial need may apply for assistance from a variety of sources. Government assistance is available to full-time students in the form of grant and/or loan and to part-time students as bursaries or loans.

For further information concerning government assistance see the introductory section on financial assistance and check with the university's Student Financial Aid Office. The Student Financial Aid Office will also have details on bursaries and scholarships offered by the university.

Tuition Fees 1983-84
(including incidental fees)
Medicine $1 504
Engineering $1 299
Science and engineering (pre-science year) $2 102
All other programs $1 204

Further Information
Inquiries about undergraduate admission should be directed to
Office of the Registrar
(Admissions)
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-3928

Information and application forms for student awards and loans may be obtained from
Mr. Michel Leduc
Director
Student Financial Aid Office
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-2484

For information about university programs, write to
Mrs. Sylvie Lindsey
Admissions Officer
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-3930

Inquiries regarding campus visits for students should be directed to
Campus Tours
Office of the Registrar
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-3937

Queen's University

Kingston

Principal: Ronald L. Watts

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	9 828	1 276
Part-time	2 524	388

General Admission Requirements
Applicants must satisfactorily complete a full year of academic work at the Grade 13 level as certified by the school. No student with an average of less than 60% will be considered for admission. Because of limitations of space, preference will be given to students with the best qualifications.

Students, in planning their secondary school programs, should note that a number of courses taken in the first university year have secondary school prerequisites. Details may be found in the general information book, *Your Future at Queen's*. Generally, students continuing university work in the mathematics or natural sciences are expected to have Grade 13 or equivalent standing in those subjects.

Early conditional offers of admission are made each year to applicants who have attained satisfactory standing, who are recommended by their school officials and who satisfactorily complete Grade 13. The details of standing required for admission are determined each year and vary among the faculties and schools. Early offers of admission will be withdrawn from students who have failed to complete the year satisfactorily.

Bachelor of Arts
A Bachelor of Arts degree may be obtained in either three years (general) or four years (honours). The general BA includes 15 courses over the three-year period with a minor concentration of five courses in one subject. In some disciplines, one or two prerequisites or co-requisite courses in other disciplines may be required to support a minor concentration. Additional courses to complete the 15 courses required for the degree may be chosen freely by the student, provided the prerequisites for the courses have been met. Minor concentrations for the general program are listed under the specific subject areas.

The honours BA includes a minimum of 19 courses over the four-year period arranged in one of the following patterns:
a) major concentration of 10 courses in one subject plus electives
b) two medial concentrations of seven courses in each of two subjects (one must be a humanities or social science) plus electives
c) a special field concentration of 14 courses in two or more subjects organized around a particular period, culture, problem or discipline area plus electives. Concentrations for the honours program are listed under specific subject areas.

Admission to either the four-year honours BA or the three-year general BA is based on successful completion of a full year of academic work at the Grade 13 level, or equivalent as certified by the school. Although there are no Grade 13 subject requirements for admission into a Bachelor of Arts program, students intending to take concentrations in languages, computing and

information science, mathematics or natural science should be preparing themselves in their secondary school programs for the appropriate first-year university courses in these subjects. The list which includes admission requirements into the Bachelor of Science program (see following section), is a guide to the Grade 13 prerequisites which are appropnate to minor or medial concentrations in computing and information science, mathematics and natural science.

Honours concentrations entirely in mathematics and the natural sciences lead to the degree of BSc (Honours) or BSc (Honours, subject of specialization).

Bachelor of Science
A Bachelor of Science degree may be obtained in four years, leading to either an honours Bachelor of Science or an honours Bachelor of Science with a subject of specialization. The Bachelor of Science honours program includes 20 courses over the four-year period and may be pursued according to the following patterns:
a) a major concentration of 10 courses designated by one of Mathematics or the Natural Sciences Departments, plus supporting courses and electives
b) a 14-course major concentration specified by two or more of Mathematics, Computing and Information Science, or the Natural Sciences Departments, plus supporting courses and electives.

The honours Bachelor of Science with a subject specialization (20 courses over a four-year period), consists of a highly specialized concentration of up to 18 courses involving intensive study in a given area specified by one or more departments, plus supporting courses and electives. Major concentrations and specialized concentrations are listed under specific subject areas. Fourteen course major concentrations in the BSc honours are listed uder "Mathematical and Physical Sciences".

Requirements for admission to the Bachelor of Science programs are as follows: as a minimum, applicants must present any three credits chosen from algebra, calculus, relations and functions, chemistry, and physics. The following list sets out the recommended Grade 13 credits required for admission into all of the prescribed first-year courses in each of the science concentrations. Biochemistry – Grade 13 calculus, chemistry, physics; biology – calculus, chemistry, physics; chemistry – calculus, chemistry, physics; computing and information science – calculus, algebra, relations and functions; geography – chemistry or physics plus two of calculus, algebra, relations and functions, another science; geological sciences – calculus, chemistry, physics; life sciences – calculus, chemistry, physics; mathematics – calculus, algebra, relations and functions; mathematical physics – calculus, algebra, physics; physics – calculus, chemistry, physics; probability and statistics – calculus, algebra, relations and functions.

Candidates lacking the recommended prerequisites must make up the deficiencies in first year. Applicants who are short prerequisite courses for BSc programs may be required to enroll as BA students until these deficiencies have been overcome.

Agricultural and Biological Sciences

• Bachelor of Arts

Three-year general (minor concentration)
Available in: biochemistry, biology, life sciences.

• Bachelor of Arts

Four-year honours (medial concentration)
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Four-year honours (major concentration)
Available in: biology.

• Bachelor of Science

Four-year honours (14 course major concentration)
Available in: biology and chemistry (combined), biology and geological sciences (combined).

• Bachelor of Science

Four-year honours (specialization concentration)
Available in: biochemistry, biology, life sciences.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Education
The Faculty of Education offers programs leading to a Bachelor of Education or a Diploma in Technical Education. In most cases students qualify for the Ontario Teacher's Certificate but a student can qualify for the degree without certification.

Continuing education for teachers is available and programs leading to a Master of Education degree may be taken on either a part- or full-time basis.

• Bachelor of Education – Consecutive Programs
The Faculty of Education offers three one-year programs leading to a Bachelor of Education for graduates of a general or honours degree program. Upon completion, graduates will normally be recommended to the Ontario Ministry of Education for an Ontario Teacher's Certificate.

The three programs are: primary-junior for teachers of kindergarten to Grade 6, junior-intermediate for Grades 4 to 10 and intermediate-senior for Grades 7 to 13.

Students may complete a course leading to an Additional Qualification in English as a Second Language, French as a Second Language, Reading or Special Education.

Candidates complete a practicum which includes student teaching and community service. There are eight weeks of student teaching in selected elementary and secondary schools in eastern and northern Ontario. Community service involves educationally related practical experience in the community.

Technological studies program
This program leads to the Ontario Teacher's Certificate and qualifies the holder to teach in the Technical Department of a secondary school in Ontario.

Applicants must have completed Ontario Grade 12 (or equivalent) plus five years of further education and/or work experience (two years minimum).

Non-certificate programs
There is provision for candidates to complete a program leading to the Bachelor of Education which does not lead to the Ontario Teacher's Certificate. Candidates may wish practical experience in areas which do not require this certificate, as in community colleges, art galleries or community theatre.

Further information about any of the programs may be obtained from the Registrar, Faculty of Education, Queen's University, Kingston, Ontario K7L 3N6.

• Faculty of Arts and Science/Faculty of Education – Concurrent Programs
The Faculty of Arts and Science and the Faculty of Education offer concurrent programs leading to the following degrees: BA/BEd; BA (Honours)-/BEd, BSc (Honours)/BEd, BSc (Honours, subject of specialization)/BEd. The requirements for and structure of each of the arts and science degrees are described on the previous pages.

During the first three years, students take 14 of the courses required for the arts and science degree, and complete approximately 30% of the requirements for the BEd degree. Students who are working towards an honours degree in arts and science spend their fourth year entirely in arts and science, returning to the concurrent program for their fifth and final year.

In the fall term of the final year of the program students take any courses needed to complete the requirements for the arts and science degree, and they also complete the remaining course requirements for the BEd degree. During the winter term students complete a four month internship in selected schools.

Admission requirements
Applicants must satisfy the general admission requirements for Queen's, plus the specific admission requirements for the desired arts and science degree program and concentration.

• Bachelor of Physical and Health Education and Bachelor of Arts Program

Combined program
A four-year program consisting of 25½ courses in arts and in physical and health education. Courses in biology, psychology, sociology, anatomy and physiology set the basis for the specific theoretical and practical study of sport, fitness, health and physical activity. Optional courses are available in arts, science, commerce and in physical education theory and practicum so that preparation for future careers is optimal. Upon successful completion of the program, students are granted a Bachelor of Arts degree and a Bachelor of Physical and Health Education degree.

Admission requirements
Grade 13 with one credit in chemistry. The following Grade 13 courses will be helpful to students in their undergraduate university courses: algebra, biology, physical education, physics and the sucial sciences.

Engineering and Applied Sciences

• Bachelor of Science – Engineering
A four-year engineering program offered by the Faculty of Applied Science leading to a Bachelor of Science. The first year is common to all engineering programs with the student taking courses in mathematics, physics, chemistry, geology, engineering graphics and computer programming (Fortran).

Before commencing second year, the student must select one of the following 10 programs: chemical engineering, engineering chemistry, civil engineering, electrical engineering, geological engineering, mathematics and engineering, mechanical engineering, metallurgical engineering, mining engineering, or engineering physics.

The faculty has developed an extended first-year program, designed to enable certain first-year students to compensate for deficiencies in chemistry, mathematics and physics by providing an intensive review of prerequisite material in the fall term, proceeding with the normal program in the winter term and in May and June. Upon completion of this extended program, the student is prepared to enter second year in the regular program the following September.

Admission requirements
Grade 13 with three credits in mathematics (functions and relations, calculus, algebra), one credit in chemistry and one credit in physics. Admission is based on a comprehensive evaluation of the student rather than on academic record alone, and students are invited to submit any information, in addition to Queen's requirements, which they feel would be helpful in making admission decisions.

Fine and Applied Arts

• Bachelor of Arts

Three-year general (minor concentration)
Available in: art history, drama, film studies, music.

• Bachelor of Arts

Four-year honours (medial concentration)
Available in: art history, drama, film studies, music.

• Bachelor of Arts

Four-year (major concentration)
Available in: art history, drama, film studies, music.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Fine Art
A four-year program offered by the Department of Art which maintains a balance of studio and academic studies. The program promotes a high level of awareness, understanding and excellence in the study and practice of art, and high critical standards.

The curriculum consists of 20 courses, the equivalent of 10 courses in studio art, five in art history and five electives. The studio courses comprise drawing, painting, sculpture, printmaking and photography, and they occupy a minimum of 18 hours each week.

Graduates of the Bachelor of Fine Art program may pursue careers as artists, as secondary school teachers (provided they complete a fifth year at a faculty of education), as teachers in post-secondary institutions, or as museum and gallery personnel.

Admission requirements
Grade 13 or equivalent. Grade 13 art should be included where possible, but it is not mandatory. Assessment for admission rests on an interview and portfolio examination as well as on academic achievement.

• Bachelor of Music
A broad four-year course of study designed to meet the needs and interests of future professional musicians with areas of specialization in performance, instrumental and choral music in education, history and literature of music, and theory and composition.

Students in all of these concentrations have the option of studying performance in individual lessons. In addition, all students participate in the work of the small and large ensembles of the Music Department. This program also includes a minimum of five courses offered by other departments.

Admission requirements
Academic requirements: Grade 13, possibly including Grade 13 music.
Music requirements: The following Royal Conservatory of Music (Toronto) levels (or equivalents) are normal requirements:

Grade 9 piano, Grade 2 rudiments; *or*

Grade 8 organ, Grade 8 piano and Grade 2 rudiments; *or*

Grade 8 standard orchestral or band instrument, or classical guitar, or voice, or free bass accordion; Grade 6 piano; and Grade 2 rudiments.

All applicants will be invited to appear for a personal audition, interview and an aural discrimination test. Auditions are normally held in March or April of each year, except where distance makes a personal visit in July difficult.

Applicants who do not have the music requirements specified above, but who are experienced as instrumentalists or singers, may be admitted on the basis of the qualifying audition. Those candidates who have not completed the Grade 6 piano requirement prior to entering the BMus program must do so, at their own expense, before proceeding to second year.

Applicants presently enrolled in Ontario Grade 13 or equivalent, must submit their applications through the Ontario Universities Application Centre. Other applicants should write to the Assistant Registrar (Admissions), Queen's University.

Health Professions and Medical Sciences

• Bachelor of Arts

Three-year general (minor concentration)
Available in: health.

• Bachelor of Nursing Science
A four-year integrated program of basic sciences, humanities and nursing leading to a Bachelor of Nursing Science Degree. This program equips graduates for a wide variety of careers in health care.

Clinical practice in hospitals and community health settings is an important element within each year of the program. In addition, there are five weeks of concentrated clinical practice at the end of the first and the third year of the program.

The Bachelor of Nursing Science program prepares individuals for employment in a wide range of health care services including general hospitals, chronic care and rehabilitative facilities, home care, psychiatric services, northern nursing services and public health. In addition, individuals may pursue graduate studies in nursing or in a related field. With experience, individuals may also embark on careers in nursing administration and nursing education.

Graduates are eligible to write examinations for registration as a nurse in the province of Ontario and in other Canadian provinces.

The demand for persons holding a nursing degree from Queen's remains strong with the majority of graduates being able to find positions in Canada in their area of interest.

Admission requirements
Grade 13 with one credit in mathematics and one credit in chemistry. Grade 13 biology and English are strongly recommended.

The deadline for receipt of applications is March 1.

• Doctor of Medicine
A four-year program leading to the degree of Doctor of Medicine. The main objective of the structured program is to afford each student the maximum opportunity to develop the knowledge, skills and attitudes that will best motivate and equip him or her to choose the field of endeavour most appropriate to his or her talents. The curricula and educational methods are under continual scrutiny with this main objective in view.

Admission requirements
Seventy-five students are admitted annually into the first medical year and are selected on the basis of a strong academic record and the assessment by the Admissions Committee of personal characteristics felt to be most appropriate for the study of medicine at Queen's and for the subsequent practice of medicine. The application centre must receive applications by November 15.

To be eligible for admission, students must have successfully completed at least two years of university work beyond Grade 13 and have included credit for one full university course, including laboratory work, in each of the following subject areas:
a) general physics,
b) general chemistry,
c) general biology or zoology, and
d) organic chemistry.

All candidates are requested to write the New Medical College Admissions Test.

In selecting applicants, equal weighting is given to scholastic achievement and personal assessment. Place of residence and location of the university where studies have been undertaken are not criteria in the selection process. Gender is not considered in the selection process and there is no quota on the number of female applicants who will be admitted.

The Admissions Committee does not give preference to applicants who have studied in a particular undergraduate program. The baccalaureat degree is not required, and candidates having completed two or three years of university work will be given the same consideration as candidates possessing an undergraduate or graduate degree. In making its selection, the Admissions Committee carefully considers autobiographical information submitted by the applicant and assessments made by referees. An interview with the Admissions Committee is not an integral part of the selection process; however, candidates may be granted an interview with the Admissions Officer at their request, and the Committee may occasionally request an interview of any applicant.

• Occupational Therapy
A four-year degree program leading to a Bachelor of Science (Occupational Therapy). The student will take courses in anatomy, biology, occupational therapy, physiology, kinesiology, psychology, sociology, plus a number of options, and in the fourth year will study research and clinical developments, administration of an occupational therapy department, and will conduct an in-depth study of a selected clinical subject.

There are eight to 12 weeks of supervised clinical practice between the second and third years and 16 weeks between the third and fourth years to complete university requirements and for provincial licensing. This precludes summer employment.

Admission requirements
Grade 13 with one credit in mathematics and one credit in chemistry. Grade 13 biology is strongly recommended. Selection will be based on academic qualifications and on information

gained from an autobiographical letter. An interview is not mandatory and is not an integral part of the admission process. The deadline for receipt of applications is March 1.

• Physical Therapy
A four-year degree program leading to a Bachelor of Science (Physical Therapy). The student will take courses in anatomy, biology, physical therapy, physiology, psychology, plus a number of options and, in the fourth year, will study research and clinical development, administration of a physical therapy department and will conduct an in-depth study of a selected clinical subject.

There are eight to 12 weeks of supervised clinical practice between the second and third years and 16 weeks between the third and fourth years to complete university requirements and for provincial licensing. This precludes summer employment.

Admission requirements
Grade 13 with one credit in mathematics and one credit in chemistry. Grade 13 physics and biology are strongly recommended. Selection will be based on academic qualifications and on the information gained from a Personal Background Information Form. An interview is not manJatory and is not an integral part of the admission process. The deadline for receipt of applications is March 1.

Humanities and Related Courses

• Bachelor of Arts

Three-year general (minor concentration)
Available in: English, French, Germân, Greek, image of man in modern literature, Italian, Latin, philosophy, religion, Russian, Spanish.

• Bachelor of Arts

Four-year honours (medial concentration)
Available in: English, French, German, Greek, Italian, Latin, philosophy, religion, Russian, Spanish.

• Bachelor of Arts

Four-year honours (major concentration)
Available in: English, French, German, Greek, Latin, philosophy, religion, Spanish.

• Bachelor of Arts

Four-year honours (special field concentration)
Available in: classics, English, French, French translation and French Canadian studies, Greek language and civilization, language and linguistics, Latin, Latin language and civilization, philosophy, Russian and East European studies, Spanish and Latin American studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Theology: BTh
A three-year program in theology for a few selected older students (over 31). Completion of five arts courses is a prerequisite.

• Master of Divinity: MDiv
A three-year graduate program for students preparing for the ordained ministry of the church. Courses include Hebrew Bible, New Testament, biblical languages, philosophy of religion, systematic theology, church history, ethics, and the practice of ministry.

• Master of Theology: ThM
A one-year post-MDiv program for clergy and church workers who seek further training in pastoral care and counselling.

• Master of Theological Studies: MTS
A two-year graduate program in academic theology which enables students to study particular areas in some depth.

Mathematicel and Physical Sciences

• Bachelor of Arts

Three-year general (minor concentration)
Available in: chemistry, computing and information science, geological sciences, mathematics, physics.

• Bachelor of Arts

Four-year honours (medial concentration)
Available in: chemistry, computing and information science, geological sciences, mathematics, physics, statistics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Four-year honours (major concentration)
Available in: chemistry, computing and information science, geological sciences, mathematics, physics.

• Bachelor of Science

Four-year honours (14 course major concentration)
Available in: chemistry and biology (combined), chemistry and computing and information science (combined), chemistry and geography (combined), chemistry and geological sciences (combined), chemistry and mathematics (combined), computing and information science and mathematics (combined), computing and information science and physics (combined), geological sciences and biology (combined), geological sciences and geography (combined), mathematics and physics (combined).

• Bachelor of Science

Four-year honours (specialization concentration)
Available in: astrophysics, chemical physics, chemistry, geological sciences, geological science with physics, mathematical physics, mathematics, physics, probability and statistics, theoretical physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general (minor concentration)
Available in: classical studies, economics, geography, history, political studies, psychology, sociology.

• Bachelor of Arts

Four-year honours (medial concentration)
Available in: classical studies, economics, geography, history, political studies, psychology, sociology.

• Bachelor of Arts

Four-year honours (major concentration)
Available in: classical studies, economics, geography, history, political studies, psychology, sociology.

• Bachelor of Arts

Four-year honours (special field concentration)
Available in: Canadian studies, classical studies, Commonwealth studies, economics, French translation and French Canadian studies, geography, Greek language and civilization, history, Latin language and civilization, medieval studies, political studies, psychology, Russian and East European studies, social behaviour, sociology, Spanish and Latin American studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Four-year honours (major specialization)
Available in: geography.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

• Bachelor of Science (14 course major concentration)
Available in: geography and chemistry (combined), geography and geological sciences (combined).

• Bachelor of Commerce
A four-year program leading to the degree of Bachelor of Commerce and designed to prepare students to pursue rewarding careers in the complex world of business or related fields. The curriculum provides a balanced program embracing the fields of accounting, finance, marketing, production, industrial and human relations, and quantitative methods. The structure of this curriculum enables the student to acquire a breadth of perspective, as well as to concentrate on one or more chosen functional areas. Since close relations exist between the programs in the School of Business and its allied disciplines in the university, the student is afforded the opportunity of selecting optional courses in the fields of computing and information science, economics, geography, history, languages, mathematics, philosophy, political studies, psychology, sciences and sociology.

Admission requirements
Grade 13 with one credit in English and two credits in mathematics (chosen from algebra, calculus, relations and functions). It is recommended that students include calculus as one of the mathematics credits.

The School of Business also offers a two-year post-graduate program in business studies leading to the Master of Business Administration degree.

• Bachelor of Laws
A three-year program in law leading to the LLB degree.

The Faculty of Law, with a total enrolment of under 450 students and a very favourable professor-student ratio, encourages personal contact between professors and students. The Faculty has exceptional staff and library resources in the fields of international legal studies, constitutional and administrative law, criminal law and policy, and labour relations law.

Admission requirements
Bachelor's or equivalent degree from a recognized university; or, at least two years of academic work in a recognized university after Grade 13; or, at least three years of academic work in a recognized university after Grade 12. The above are minimum requirements. Due to the large number of applications only applicants with averages over 75% and law aptitude test scores in excess of 550 are likely to be admitted. Place of residence and location of the university where studies have been taken are not considered.

All candidates are requested to write the Law School Admission Test.

Residence
The University provides residence accommodation in single and double rooms for approximately 1 100 undergraduate men and 1 400 undergraduate women including a fair proportion of upper-year students, and 300 graduate students of both sexes.

Bedrooms are completely and comfortably furnished with a single bed, desk and chair, wardrobe or closet and dresser for each student. Each room is equipped with a private telephone. In most areas facilities include sitting rooms on various floors, large central lounges, study rooms, and music and recreation areas. Laundry equipment is available in each residence and includes automatic coin-operated washers, driers, irons and ironing boards.

A Housing Service is provided to assist students, faculty and staff to locate off-campus private housing accommodation. Information regarding the availability of private accommodation is on display in the office.

Office hours are 8:30 a.m. to 4:30 p.m. Monday to Friday, during the fall and winter term.

Inquiries should be addressed to the Office of Apartment and Housing Service, 86 Queen's Crescent, Kingston, (613) 547-2890.

Residence fees 1983-84
Residence fees vary, according to the length of the student's academic session.
$1 479 – $1 750 (excluding meals)
$2 762 – $3 092 (single room including meals)
$2 659 – $2 841 (double room including meals)

Tuition Fees 1983-84
Tuition fees for full-time students are subject to change but currently are as follows for students admitted to first year:
Arts, science, business, education, rehabilitation therapy, physical and health education, nursing and law $1 101 (plus incidental fees of $113.30)
Applied science $1 196 (plus incidental fees of $113.30)
Medicine $1 401 (plus incidental fees)
For information on foreign student fees, please contact Admissions Office.

Further Information
For an opportunity to view university life as a Queen's student, students are welcome to visit the campus Monday through Thursday at 9:00 or 10:00 a.m. during the academic year. During the summer months, students and their parents may go on a guided walking tour of the campus, with tours leaving the Liaison Office at 1:00 p.m. Monday – Friday.

Inquiries about general information and visits to Queen's should be directed to
Liaison Office
Queen's University
Kingston, Ontario K7L 3N6
Telephone (613) 547-6660

Inquiries regarding admission should be directed to
Assistant Registrar (Admissions)
Queen's University
Kingston, Ontario K7L 3N6
Telephone (613) 547-5504

Information about student awards and loans may be obtained from
Assistant Registrar (Student Awards)
Queen's University
Kingston, Ontario K7L 3N6
Telephone (613) 547-6660

Royal Military College

Kingston

Commandant and Vice-Chancellor:
Brigadier-General F.J. Norman

The Royal Military College had its beginning in 1874 in the Act of Parliament establishing "an institution for the purpose of imparting a complete education in all branches of military tactics, fortification, engineering, and a general scientific knowledge of the military profession, and for qualifying officers for command and for staff appointments."

The site selected was the old naval dockyard on Point Frederick immediately east of Kingston. The college was opened in June 1876 with the first class of 18 cadets. The objectives of the Canadian military colleges are:
1. to prepare and motivate officer cadets for effective service as commissioned officers in the Canadian Forces by:
– providing a university level education in both official languages in appropriate disciplines designed on a broad base to meet the unique needs of the forces,
– developing qualities of leadership,
2. to improve in appropriate fields the educational background of students who are commissioned officers in the Canadian Forces by providing undergraduate and post-graduate courses in both official languages.

The courses of instruction provide a sound and balanced liberal, scientific and military education. Cadet wing organization and military training seek to develop a high degree of physical fitness in the officer cadets and to imbue them with a sense of responsibility, self-discipline, fair play and fellowship. An officer cadet in many ways, in the classroom, on parade, at games and in other extra-curricular activities is given an opportunity to command, to learn the art of management, and to experience the value of good team work. The co-mingling of English and French-speaking cadets, of cadets from all provinces, of cadets enrolled in all components of the Canadian Forces is designed to break down differences, and inculcate a spirit of tolerance and understanding. Officer cadets are given a basic knowledge of all elements while training in their chosen classifications and obtain a good understanding of the problems of national defence.

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	742	38
Part-time	79	31

General Admission Requirements
Ontario applicants completing Grade 13 may apply for Royal Military College or Royal Roads Military College. Those completing Grade 12 of the five-year program may apply to the *Collège militaire royal de Saint-Jean*.

Applicants planning to enter the Royal Military College in the fall of any year are urged to submit an application to a Canadian Forces Recruiting Centre as soon as possible. Evidence of final year academic standing is not required at time of application.

Academic Qualifications for 1982-83
It should be noted that all degree programs at the Canadian military colleges are of four years' duration beyond the normal secondary school level required for university admission, except for candidates entering the *Collège militaire royal de Saint-Jean* where a five-year course is required.

General Qualifications
A candidate for admission must:
1. be a Canadian citizen,
2. be 16 years of age on or before January 1 of the year of enrolment, and (for entry to RMC, RRMC or first year, not preparatory year, at CMR), be under 21 years of age on January 1 of the year of enrolment, or (for entry to the preparatory year at CMR) be under 20 years of age on January 1 of the year of enrolement,
3. meet the minimal medical classification for enrolment as prescribed,
4. obtain a passing standing in a series of pre-enrolment tests as prescribed,
5. be single and undertake to remain single until commissioned,
6. possess the necessary academic qualifications,
7. obtain a passing standard from the pre-academic Basic Officer Training Course.

• Degree Programs Offered
Arts
Engineering
Science

Required courses for all programs in arts include English, mathematics, military leadership and management, physical education, science and second-language training (English or French). Required courses for all programs in science or engineering include economics, English, history, military leadership and management, physical education, second-language training (English or French) and two additional arts elective courses.

Language of Instruction
Both English and French are languages of instruction. Many degree courses are offered in both languages, but examinations may be taken in the language of the candidate's choice.

Royal Military College
To meet the minimum requirements for admission to the general course at the Royal Military College, an applicant must offer standing at a level satisfactory to the college (Grade 13 in Ontario) in the following subjects:
1. English or French (one credit course acceptable for Ontario applicants),
2. mathematics (calculus, and functions and relations), and
3. two or three of algebra, chemistry, physics.

To meet the minimum requirements for admission to the arts course at the Royal Military College, an applicant must offer standing at a level satisfactory to the college (Grade 13 in Ontario) in the following subjects:
1. English (one or more credits),
2. functions and relations or calculus,
3. at least two of the following: history, French, calculus, algebra, physics, chemistry, geography, economics, classical studies, social studies, biology or another language,
4. other acceptable subjects to complete Grade 13.

In other provinces
English or French, mathematics and one or two of chemistry and physics, and any other approved subject (or subjects) to make up the full requirements for graduation in the current year of work.

Royal Roads Military College
Requirements vary only slightly from those of the Royal Military College.

Preparatory year at Collège militaire royal de Saint-Jean
Graduates from secondary schools in Ontario should have successfully complete d Grades 11 and 12 of the five-year course, including the following subjects: English (for English-speaking applicants) or français (for French-speaking applicants), mathematics, physics and chemistry.

Physical Requirements
Candidates are required to meet the common enrolment standards of the Canadian Forces. The fundamental medical requirement is a sound, healthy body with normal mental and muscular co-ordination. Particular attention is given to the cardiovascular system, the respiratory system, central nervous system, visual acuity, colour vision, eye muscle balance, organs of speech and sense of hearing. Any condition which, as it exists, or which, due to possible progression, may limit the candidate's career as a member of the Canadian Forces will be cause for rejection.

Candidates should be prepared to participate in a vigorous, progressive physical training program.

Financial Assistance
The fees of an officer cadet who is a member of the Regular Officer Training Plan will be paid for by the Department of National Defense. A cadet is also entitled to pay and allowances prescribed by the plan.

Other applicants are eligible to apply for a number of scholarships and bursaries, including the Ontario Student Assistance Program.

Dominion Cadetships
Fifteen Dominion Cadetships each worth the value of tuition, meals and accommodation are available to first year reserve entry cadets at the Canadian military colleges. A candidate must be the child of a person who died or was killed or is severely incapacitated as a result of service in a component of the Armed Forces of Canada.

Applications must be made in writing to
National Defence Headquarters
Ottawa, Ontario K1A 0K2
Attention: Director of Recruiting and Selection

Royal Military College of Canada Foundation Scholarships
A number of scholarships are open to competition each year among all reserve entry applicants for admission to the Canadian military colleges. Each scholarship has a value of $800 per year until graduation providing the holder successfully completes each previous college year. An applicant, to be awarded a scholarship, must be accepted as a reserve entry candidate for the Royal Military College, Kingston, Ontario; Royal Roads Military College, Victoria, B.C.; or *Collège militaire royal de Saint-Jean*, Quebec.

Further information may be obtained from
Secretary-Treasurer
RMC Club of Canada
Kingston, Ontario K7L 2W3

Residence Accommodation
All cadets at the Canadian military colleges are in full-time residence at the colleges. At RMC single rooms are normally provided except early in the recruit year when it is usually found beneficial to place two cadets in a room. Dining facilities are provided. Full recreational facilities, including an indoor swimming pool, are available within close proximity of the residences.

The college is divided into squadrons under the direction of cadet officers in their senior year with an experienced serving officer as squadron commander. Overall direction is in the hands of the Director of Cadets.

This combination of collegiate and military life provides an unparalleled opportunity for young men and women to study, in practice, the problems of leadership and management that are discussed in the classroom.

Fees (Reserve Entry Cadets)
The following scale applies to all officer cadets attending a Canadian military college with reserve status: *(Fees quoted are subject to revision.)*
1. college fee of $800;
2. payment for meals and accommodation (approximately $190 per month while in residence at a college);
3. an annual recreation club fee of $60.

Further Information
Inquire with the commanding officer of any Canadian Forces Recruiting Centre, or write to
Registrar
Royal Military College of Canada
Kingston, Ontario K7L 2W3
Telephone (613) 545-7302

Ryerson Polytechnical Institute

Toronto

President: B. Segal

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	8 872	-
Part-time	2 301	-

The following program listing outlines basic admission requirements. Interested students are advised to contact the Office of Admissions for more detailed information.

Programs Offered

• Aerospace Engineering Technology – Diploma
Three years. Diploma graduates who wish to obtain a degree may do so in the field of mechanical engineering technology, subject to space availability. Please consult the department for details.

Admission requirements
An OSSGD including a minimum of 60% average in the following advanced level courses: Grade 12 English, Grades 11 and 12 mathematics, Grade 11 physics and Grade 12 chemistry. Preference may be given to applicants with Grade 13 standing in mathematics (one of functions and relations, calculus, or algebra), minimum 60%.

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 functions and relations, calculus, physics, and chemistry.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

• Applied Computer Science – Degree
Four years leading to a Bachelor of Technology (Applied Computer Science).

Admission requirements
An OSSHGD including Grade 13 English, two Grade 13 mathematics (one of which must be functions and relations and one of calculus or algebra), Grade 13 physics. Preference will be given to applicants who have obtained a minimum of 60% in the prerequisite subjects. Students with an OSSHGD, who lack one of the prerequisite requirements, may be considered subject to space availability.

• Applied Geography – Degree
Four years leading to a Bachelor of Applied Arts (Geography).

Admission requirements
An OSSHGD. It is recommended that applicants include geography, mathematics and English in their Grade 13 program. Applicants will be requested to appear for an interview, where travelling distance permits.

• Architectural Science – Degree
Four years leading to a Bachelor of Technology (Architectural Science).

Admission requirements
An OSSHGD including Grade 13 English, mathematics (functions and relations preferred), and physics. Applicants will be asked to submit a portfolio and, where travelling distance permits, appear for an interview.

Note: Effective September, 1984, preference will be given to applicants with 60%, or higher, in each of the prerequisite subjects.

• Arts – Diploma
Three years.

Admission requirements
An OSSGD including three of the following Grade 12 subjects: English, economics, history, geography, any language, mathematics, physics, chemistry and biology, (advanced 60%, general 70%), plus one other Grade 12 subject. Applicants will be requested to appear for an interview, where travelling distance permits.

• Business Administration – Diploma and Degree
Four years leading to a Bachelor of Business Management.

Admission requirements
Diploma: An OSSGD with a minimum of 10 credits in Grades 11 and 12 including Grade 12 English (advanced 60% or higher, general 70%), Grades 11 and 12 mathematics (advanced 60% or higher). Grade 13 mathematics of investment or finance is not an acceptable mathematics course.

Note: Effective September, 1984, general level English will no longer be acceptable.

Duration: Three years.

Degree: Ryerson Business Administration Diploma with a 2.70 grade point average. The number of students granted full-time student status is limited, therefore, priority will be given to applicants who possess the work experience requirement which existed prior to September, 1983. A limited number of additional students will be admitted to full-time degree studies, however, the number selected will be subject to space availability, and will be ranked according to grade point average.

Duration: Equivalent to one year of study.

• Chemical Engineering Technology – Diploma and Degree
Four years leading to a Bachelor of Technology (Chemical Engineering).

Admission requirements
Diploma: An OSSGD including an average of 60% in the following advanced level courses; Grades 11 and 12 English, Grades 11 and 12 mathematics, Grade 11 physics and Grade 12 chemistry.

Note: Effective September, 1984, preference will be given to applicants with the OSSHGD including 60%, or higher, in Grade 13 chemistry, physics, functions and relations, and calculus.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

Duration: Three years.

Degree: Ryerson Diploma in Chemical Engineering Technology. Ryerson diploma graduates with an average grade of C (grade point average 2.0) or better in the 5th and 6th semester diploma courses will be given unconditional admission to the degree program. These students will be admitted to the degree phase of the same option completed in the diploma. Applicants who do not meet the above admission requirements will be required to complete prescribed qualifying and/or make-up courses on a non-credit basis. Upon successful completion of the qualifying courses, the applicant will be admitted to the degree program.

Duration: Equivalent to one year of study.

• Civil Engineering Technology – Diploma and Degree
Four years leading to a Bachelor of Technology (Civil Engineering).

Admission requirements
Diploma: An OSSGD including Grade 12 English, Grades 11 and 12 mathematics (advanced 60%), Grade 11 physics and Grade 12 chemistry (advanced 60%).

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus. Preference may also be given to applicants who have 60%, advanced, in Grade 12 English.

Duration: Three years.

Degree: Ryerson Diploma in Civil Engineering Technology. Graduates of three-year civil technology programs (non-Ryerson graduates) will be considered for admission to a third year (5th and 6th semester) option in Ryerson's diploma program. These students must successfully complete all courses in the diploma option in order to be considered for admission to the degree. Applicants with academic qualifications beyond this level, and/or related work experience, will be assessed on an individual basis.

Duration: Equivalent to one year of study. Students are also required to complete one year of work experience (before, during, or after degree studies) in order to be eligible to receive the degree.

• Construction Management – Degree
One year leading to a Bachelor of Technology (Construction Management).

This program is being discontinued, and is not available for new registration.

• Early Childhood Education – Degree
Four years leading to a Bachelor of Applied Arts (Early Childhood Education). Part-time attendance permitted by special application.

Admission requirements
An OSSHGD including Grade 13 English. Minimum 60% preferred. Applicants should have experience working with children alone or in groups. Examples of appropriate experiences are: volunteer work in day care centres, leading Brownie Packs, volunteering as a Big Sister or Brother, camp counselling, work in Parks and Recreation, etc. Applicants are required to submit a handwritten paper (two copies) with their application, describing their experiences with children. Interviews to assess these experiences and relevant personal characteristics are required where travelling distance permits.

Graduates from early childhood education diploma courses in Ontario community colleges may apply for admission to the third year.

• Electrical Engineering Technology – Diploma and Degree
Four years leading to a Bachelor of Technology (Electrical Engineering).

Admission requirement
Diploma: An OSSGD, minimum of 10 Grade 11 and 12 credits including 60% average in the following advanced level courses: Grades 11 and 12 English and mathematics, Grade 11 physics, Grade 12 chemistry. Preference may be given to applicants with credits in Grade 13 mathematics (one of functions and relations, calculus, or algebra), physics, and chemistry.

Note: Effective September, 1984, the OSSHGD will be required for admission. Preference will be given to students with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus. Students with the OSSHGD, who lack one of the above Grade 13 subjects, will be considered on an individual basis. Students are also advised to include Grade 13 algebra in their studies, if possible.

Duration: Three years.

Degree: Ryerson Diploma in Electrical Engineering Technology, with an average grade of C (2.0 grade point average), or higher, in 5th and 6th semester diploma courses. Applicants who do not meet the above requirements will be required to complete prescribed qualifying and/or make-up courses on a non-credit basis. Upon successful completion of these courses, applicants will be considered for admission to the degree program.

Duration: Equivalent of one year of study on a part-time or full-time basis. Students who have completed one year of approved (post-diploma) work experience, before or during degree studies, can be credited with two project-oriented courses.

• Environmental Health – Degree
Four years leading to a Bachelor of Applied Arts (Environmental Health).

Admission requirements
An OSSHGD including Grade 13 English 60%, and Grade 12 or 13 chemistry (advanced 60%). Grade 11 or 13 biology is strongly recommended.

Duration: Four years of study. Students are eligible to pursue certification as Public Health Inspectors (C.P.H.I.(C.)), following successful completion of second year. Students must accumulate twelve months of departmentally approved work experience prior to obtaining their degree.

• Fashion – Diploma
Three years.

Admission requirements
An OSSGD including Grade 12 English (advanced 60%, general 70%). Minimum of 10 credits in Grades 11 and 12. Applicants for the fashion program must have the minimum academic requirements, as outlined. Aptitude and interests will also be assessed. A personal interview with the department may be requested, where travelling distance permits. Preference will be given to Grade 13 graduates.

A portfolio consisting of 10 to 12 items, demonstrating abilities in sewing, art, and design, is required. Portfolios can include finished garments, and/or photographs/slides of garments, and artwork. Merchandising students may be required to obtain two letters of reference from full or part-time employers. Work experience need not be directly related to fashion.

• Food, Nutrition, Consumer and Family Studies – Degree
Four years leading to a Bachelor of Applied Arts (food, nutrition, consumer and family studies).

Admission requirements
An OSSHGD including Grade 13 English. Minimum 60% preferred in English. A personal interview may be requested, where travelling distance permits.

It is recommended that applicants who plan to specialize in food and nutrition include the following subjects in their program: Grade 13 chemistry, Grade 13 biology, and Grade 12 advanced mathematics.

Those interested in a teaching career in family studies should contact their Guidance Office concerning additional Grade 13 requirements for a second teaching subject.

• Graphic Arts Management – Degree
Four years leading to a Bachelor of Technology (graphic arts management).

Admission requirements
An OSSHGD including Grade 13 English, Grade 12 chemistry and mathematics (advanced 60%, general 70%). It is recommended that applicants include chemistry in their Grade 13 program. An interview with a department faculty member may be required.

Note: Effective September, 1984, students will require 60%, or higher, in Grade 12 mathematics, advanced, and Grade 12 chemistry, advanced. General level credits in mathematics will no longer be acceptable.

• Hospitality and Tourism Management – Diploma and Degree
Four years leading to a Bachelor of Applied Arts (hospitality and tourism management).

Admission requirements
An OSSGD with a minimum of 10 credits in Grades 11 and 12, including Grade 12 English (advanced 60%, general 70%), Grades 11 and 12 mathematics (advanced 60%). Grade 13 mathematics of investment or finance is not an acceptable mathematics course.

Note: Effective September, 1984, students will require 60%, or higher, in Grade 12 English, advanced, and Grades 11 and 12 mathematics, advanced. General level credits in English will no longer be acceptable. Students may be asked to appear for an interview.

Duration: Four years plus one year of acceptable cumulative work experience to be acquired prior to admission to fourth year. Students may apply to graduate with a diploma in hotel, restaurant and institutional administration after successful completion of the first three years of the program.

• Industrial Engineering Technology – Diploma and Degree
Four years leading to a Bachelor of Technology (Industrial Engineering).

Admission requirements
An OSSGD including a 60% average in the following advanced level courses, Grade 12 English, Grades 11 and 12 mathematics, Grade 11 physics, Grade 12 chemistry. Preference may be given to applicants with Grade 13 standing in mathematics (one of functions and relations, calculus, or algebra), minimum 60%.

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

Students may apply to graduate with a diploma in Industrial Engineering Technology after successful completion of the first three years of the program.

• Interior Design – Degree
Four years leading to a Bachelor of Applied Arts (Interior Design).

Admission requirements
An OSSHGD including Grade 13 English (60%), Grade 13 mathematics-functions and relations (60%), and one of the following Grade 13 subjects with a minimum of 60%: history, art history, geography, economics, sociology, or family studies. Preference may be given to students who have included history or art history in their Grade 13 studies. The history choice should be from contemporary history selections if possible. Also, student should select physics (Grade 11 or higher). Art is strongly recommended and, where possible, the student should take art in Grades 11, 12 and 13.

Applicants will be assessed on their aptitudes and interests for a career in interior design, and will be required to appear for an interview, bringing with them a portfolio containing 12 to 15 items showing evidence of two and three dimensional creative ability. The student must have an aptitude for drawing.

• Journalism – Degree
Three years leading to a Bachelor of Applied Arts (Journalism).

Admission requirements
An OSSHGD including Grade 13 English and history. Preference will be given to candidates who have obtained a minimum of 65% in the required subjects. Reasonable proficiency in typing (minimum 35 wpm) is a decided asset and students planning to enter the journalism program are urged to acquire this skill.

Applicants are required to write a test on current events and general knowledge. Applicants will be interviewed, except as noted below. Applicants who live more than 300 miles from Toronto are required to submit a 500-word essay outlining why they want to study journalism.

Note: The Ryerson School of Journalism offers a two-year program for students who hold bachelor degrees from accredited English-language universities. For details contact the Office of Admissions.

• Laboratory Science – Diploma and Degree
Four years leading to a Bachelor of Technology (Laboratory Science).

Admission requirements
Diploma: An OSSGD including a 60% average in advanced level Grades 11 and 12 English, Grades 11 and 12 mathematics, Grade 12 chemistry. A biology or physics course is recommended.

Note: Effective September, 1984, preference will be given to applicants with the OSSHGD including 60%, or higher, in Grade 13 chemistry and biology. Grade 13 functions and relations or physics may be considered acceptable alternatives for students who are unable to fulfil the biology preference.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

Duration: Three years.

Degree: Ryerson Diploma in Laboratory Science. Ryerson diploma graduates with an average grade of C (grade point average 2.0) or better in the 5th and 6th semester diploma courses

will be given unconditional admission to the degree program. Applicants who do not meet the above admission requirements will be required to complete prescribed qualifying and/or make-up courses on a non-credit basis. Upon successful completion of the qualifying courses, the applicant will be admitted to the degree program.

Duration: Equivalent to one year of study.

• Landscape Architectural Technology – Diploma

Three years.

Admission requirements

An OSSHGD including Grade 13 English. Preference will be given to students who include mathematics, chemistry, biology and geography in their Grade 13 studies.

Applicants are required to submit a written statement (two copies), outlining their aptitudes and interests in landscape architectural technology, and are also requested to submit samples of any creative pursuits.

Note: Effective September, 1984, preference will be given to applicants with 60%, or higher, in prerequisite subjects.

• Mechanical Engineering Technology – Diploma and Degree

Four years leading to a Bachelor of Technology (mechanical engineering).

Admission requirements

Diploma: An OSSGD including a 60% average in the following advanced level courses: Grade 12 English, Grades 11 and 12 mathematics, Grade 11 physics, Grade 12 chemistry. Preference may be given to applicants with Grade 13 standing in mathematics (one of functions and relations, calculus, or algebra), minimum 60%.

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

Duration: Three years.

Degree: Ryerson Diploma in Mechanical Engineering Technology. Applicants who obtained their qualifications at another post-secondary institution will be considered for advanced standing in the diploma program as the alternative route to the degree program.

Duration: Equivalent of one year of study. Students are also required to complete one year of acceptable work experience (before, during, or after degree studies), or approved equivalent, in order to be eligible to receive the degree.

• Metallurgical Engineering Technology – Diploma

Three years.

Diploma graduates who wish to obtain a degree should consult the department for details.

Admission requirements

An OSSGD including a 60% average in the following advanced level courses: Grade 12 English, Grades 11 and 12 mathematics, Grade 11 physics, Grade 12 chemistry. Preference may be given to applicants with Grade 13 standing in mathematics (one of functions and relations, calculus, or algebra), minimum 60%.

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

• Nursing – Diploma and Degree

Diploma: Two years of study, plus a practicum at the end of the second and fourth semesters.

Degree: Two years of study beyond diploma program (or equivalent) leading to a Bachelor of Applied Arts (nursing).

Admission requirements

Diploma: An OSSHGD including a 60% average in the following advanced level courses: Grade 12 (or higher) English, Grade 11 (or higher) chemistry, Grade 11 (or higher) biology or physics. Preference will be given to students who have obtained 60% or higher in Grade 13 English, chemistry and biology. Mathematics, Grade 11 or higher, 60%, is also preferred.

Note: Effective September, 1984, preference will be given to applicants who have obtained 60% or higher in mathematics (Grade 11 or higher), advanced. Students must submit information pertaining to their state of health and immunization prior to registering. Instructions will be provided upon acceptance.

Degree: Ryerson Diploma in Nursing (or equivalent). Registered or eligible for registration in Ontario. One year of work experience in the past five years in an active treatment center. Graduates of the Ryerson Diploma program who wish admission to the degree program must reapply for admission. Part-time studies are available. Contact the program department for further information.

• Photographic Arts – Degree

Four years leading to either a Bachelor of Applied Arts (Photographic Arts) or a Bachelor of Technology (Photographic Arts) depending on options taken.

Admission requirements

An OSSHGD with a minimum of 60% in Grade 13 English. Aptitudes and interests in photographic arts will be carefully assessed. Applicants should be prepared to appear for an interview and to make available samples of work.

• Radio and Television Arts – Degree

Three years leading to a Bachelor of Applied Arts (Radio and Television Arts).

Admission requirements

An OSSHGD including Grade 13 English, minimum 70% preferred. Applicants are required to submit with their application a typewritten statement (minimum 500 words) explaining their reasons for choosing a career in radio and/or television. This statement should outline interests and/or experiences (academic or extra-curricular), which may demonstrate a capacity to succeed in the broadcasting field. These could include activities which indicate leadership abilities and/or self-motivation, an interest in society, etc., or actual work experience in the field.

Applicants will also be assessed on their aptitudes and interests for a career in radio and television arts, and approximately 300 will be selected to appear for a personal interview where travelling distance permits. Graduates of university programs will be considered, but will be required to take the full three-year program. As all assignments are required to be typewritten, students must be able to type. Unfortunately students wishing to study on a part-time, special or auditor basis cannot be admitted into this program.

• Secretarial and Administrative Studies – Diploma and Degree

Three years following Grade 13, four years following Grade 12. Students wishing to obtain a diploma may do so after completing three years of study following Grade 12, or two years of study following Grade 13. The program leads to a Bachelor of Applied Arts (Secretarial and Administrative Studies).

Admission requirements

An OSSHGD with a minimum of ten credits in Grade 11 and 12 including two credits in English (Grades 11 and 12). Preference will be given to applicants with advanced level credits. Preference may be given to applicants who have an average of 60% in English (Grades 11 and 12), advanced, or 70% in English (Grades 11 and 12), general. A knowledge of shorthand and typewriting is not required for entrance to this program.

Students holding an OSSHGD will be admitted into the second year of this program.

Note: Effective September, 1984, preference will be given to applicants with the OSSHGD.

• Social Work – Diploma, Degree

Four years leading to a Bachelor of Applied Arts (Social Work).

Admission requirements

Diploma: An OSSHGD including 60% in advanced level Grade 12 English. Preference will be given to applicants who have Grade 13 English. Due to the nature of this program, it is essential that applicants be a minimum of 18 years of age as of June 1st of the year in which they wish to commence study. However, preference will be given to those who are over 20 years of age and have two or more years of work experience in any field.

Applicants will also be assessed on their aptitudes and interests for a career in social work, and will be required to appear for an interview where travelling distance permits.

Note: Effective September, 1984, preference will be given to applicants with Grade 13 English, 60%, or higher.

Duration: Three years.

Degree: Three-year Social Work Diploma from Ryerson with a 2.70, or higher, grade point average.

Duration: One year.

• Stage Design, Directing, Playwriting, Dance –Advanced Program

Admission requirements

Applicants will be required to submit a portfolio of their work, and will be asked to prepare a special project to be discussed at the interview. This program assumes that the applicant is already an accomplished artist-designer.

• Survey Engineering Technology – Diploma, Degree

Four years leading to a Bachelor of Technology (survey engineering technology).

Admission requirements

Diploma: An OSSGD including Grade 12 English, Grades 11 and 12 mathematics (advanced 60%), Grade 11 physics and Grade 12 chemistry (advanced 60%).

Note: Effective September, 1984, preference may be given to applicants with 60%, or higher, in Grade 13 physics, chemistry, functions and relations, and calculus.

Effective September, 1985, it is the intention of the Faculty of Technology to require the OSSHGD.

Duration: Three years.

Degree: Ryerson Diploma in Survey Engineering Technology (or equivalent).

Duration: One year.

Students are also required to complete one year of acceptable work experience (before or after degree studies) to be eligible to receive the degree.

• Technological Studies – Degree

Four years leading to a Bachelor of Technology (technological studies).

Admission requirements

An OSSHGD including Grade 13 English, Grade 13 mathematics (functions and relations), Grade 13 physics, Grade 12 chemistry.

• Theatre Department (Dance, Technical/ Production, Acting) – Diploma

Acting – three years; Canadian College of Dance – three years; technical production – three years.

Admission requirements

An OSSGD. All theatre programs require that candidates be a minimum of 17 years of age, except for the dance program where the minimum age is 16. Female dance applicants must offer proof of satisfactory ballet training – a minimum of five years training (i.e., Elementary RAD standard or its equivalent). Male applicants who have not had any classical training must demonstrate a degree of physical fitness ability.

Applicants must submit a medical certificate certifying their fitness for all physical activities. Both personal and theatrical references (if possible) are required. Applicants will be expected to appear for an entrance audition and/or interview. Full information regarding auditions and interviews will be forwarded to the applicant upon receipt of application.

• Urban and Regional Planning – Degree

Four years leading to a Bachelor of Applied Arts (Urban and Regional Planning).

Admission requirements

An OSSGD. Preference will be given to candidates who have credits in Grade 13 mathematics, geography and English. Mathematics of investment or finance is not an acceptable mathematics course. Applicants must demonstrate a genuine interest in urban and regional issues. Qualified applicants will be interviewed, where travelling distance permits.

Note: Effective September, 1984, preference will be given to applicants with 60%, or higher, in prerequisite subjects.

• Continuing Education

The Continuing Education Division at Ryerson offers part-time adult learners a wide variety of options in credit and non-credit programs. Ryerson's Part-Time and Evening Study unit offers an average of 450 credit and non-credit courses each year. Many of these courses can be applied towards one of Continuing Education's certificate programs and some are equivalent to credit courses offered in Ryerson's day school diploma and degree programs. Other courses are personal-interest and management development oriented, covering a wide range of topics.

Ryerson has also developed a number of courses in co-operation with professional bodies and technological associations. These courses may be taken individually, and can often be applied towards professional designation requirements.

Academic counsellors and advisors are available at specific times during registration to assist part-time adult learners in selecting appropriate courses and in setting realistic career goals.

Although many courses require an academic background of Grade 12 or its equivalent, many students find that they are successful on the basis of their experience in business or industry.

Contact the Continuing Education Division, Ryerson Polytechnical Institute, 50 Gould Street, Toronto, Ontario M5B 1E8, or telephone (416) 595-5036.

Open College provides a unique opportunity for Toronto area people to take degree credit courses at home, listening to the radio or cassette tapes. No educational prerequisites are required to participate in this program. For further information, contact Open College, Ryerson Polytechnical Institute, 50 Gould Street, Toronto, Ontario M5B 1E8, telephone (416) 595-0485.

Financial Assistance

Students in financial need may apply for assistance from a variety of sources. Government assistance is available to full-time students in the form of loan and/or grant, and to part-time students as bursaries or loans.

For further information concerning government assistance see the introductory section on financial assistance and check with Ryerson's Financial Assistance Office. The Financial Assistance Officer will also have details on bursaries and scholarships offered by the institution.

At Ryerson, scholarships are awarded on the basis of academic excellence. The awards are generally granted automatically to the recipients for their performance during the previous academic year.

Bursaries are awarded to students with satisfactory academic performance and a demonstrated financial need. To be eligible, a student must have written at least one set of exams at Ryerson, achieved and maintained satisfactory academic standing, and demonstrated real financial need.

Residence Accommodation

O'Keefe House

Ryerson maintains a residence, O'Keefe House, near the main campus. This residence accommodates 40 male students.

Neill-Wycik College

Neill-Wycik is a 22-storey, co-educational, co-operative residence which is owned and operated by the student residents. Located one block from the main Ryerson Campus, the residence provides accommodation for approximately 700 students.

Housing Registry

Please request a Ryerson Housing Brochure "Looking for a Place to Live?" from the Housing Registry, Ryerson Polytechnical Institute, 50 Gould Street, Toronto, Ontario M5B 1E8, telephone (416) 595-5296.

Tuition Fees

(including incidental fees)

Canadian citizens and permanent residents

Semester programs, per semester $460 (fall term), $447.50 (winter term).

Foreign Students

Semester programs, per semester $1 211 or $2 141 (fall term), $1 198.50 or $1 128.50 (winter term).

Further Information

For further information write to

Office of Admissions
Ryerson Polytechnical Institute
50 Gould Street
Toronto, Ontario M5B 1E8
Telephone (416) 595-5027

Inquiries regarding scholarships, bursaries, student awards and housing should be addressed to

Student Services Department
Ryerson Polytechnical Institute
50 Gould Street
Toronto, Ontario M5B 1E8

University of Toronto

Toronto

President: Dr. D. Strangway

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	29 620	5 041
Part-time	12 465	3 886

Faculties, Schools and Institutes
Faculty of Applied Science and Engineering
Faculty of Architecture and Landscape Architecture
Faculty of Arts and Science
Faculty of Dentistry
Faculty of Education
Faculty of Forestry
Faculty of Law
Faculty of Library and Information Science
Faculty of Management Studies
Faculty of Medicine
Faculty of Music
Faculty of Nursing
Faculty of Pharmacy
Faculty of Social Work
Royal Conservatory of Music
School of Graduate Studies
School of Physical and Health Education
Banting Institute
Banting and Best Diabetes Centre
Best Institute
Centre for Comparative Literature
Centre of Criminology
Centre for Culture and Technology
Centre for Industrial Relations
Centre for International Studies
Centre for the Study of Materials
Centre for Medieval Studies
Centre for Reformation and Renaissance Studies
Centre for Religious Studies
Centre for Research in Librarianship
Centre for Russian and East European Studies
Centre for Urban and Community Studies
Cockburn Centre for Engineering Design
Computer Systems Research Group
Graduate Centre for the Study of Drama
Institute for Aerospace Studies
Institute of Biomedical Engineering
Institute of Child Study
Institute for Environmental Studies
Institute for History and Philosophy of Science and Technology
Institute of Immunology
Institute of Medical Science
Institute for Policy Analysis
Joint Centre on Modern East Asia
Canadian Centre for Toxicology
Ontario Institute for Studies in Education
Pontifical Institute for Medieval Studies

Federated Institutions
Emmanuel College
Knox College
Massey College
University of St. Michael's College
University of Trinity College
Victoria University
Wycliffe College

General Admission Requirements
Entrance to the first year of the undergraduate courses is offered, depending upon the number of places available, to candidates from Ontario secondary schools who demonstrate good standing based upon:
a) completion of secondary school studies, including a full academic program at the Grade 13 level,
b) a recommendation by the secondary school last attended regarding probable success in university studies, and
c) a complete academic report for the last three years of secondary school.

Throughout the secondary school years students should study in as many as possible of the following areas: English, French and other languages, mathematics, sciences, and social studies. Students should also consider carefully what aspects of their projected university work will entail prerequisite studies. Most faculties regard certain Grade 13 subjects as necessary preparation and these are listed under the entry for each division.

A full description of these admission requirements is contained in the admission handbook entitled *A First Look* (see note following "Application for Admission"). Applicants to programs in business administration, education, library science, social work and child study must hold a bachelor's degree.

Any change in entrance requirements for September 1984 will be communicated to high schools in February or March 1983.

Bachelor of Arts, Bachelor of Science, Bachelor of Commerce
For the purposes of admission to the arts and science program in 1982 and thereafter, the university has arranged most Grade 13 academic subjects into the following groups:
Group A: English/anglais/English as a second language;
Group B: languages other than English;
Group C: mathematics;
Group D: sciences;
Group E: other humanities and social sciences;
Group F: other subjects.

Grade 13 students seeking admission on the basis of a Grade 13 program completed in 1982 and thereafter will be expected to present at least six Grade 13 subjects distributed as follows:
a) at least one credit from group A,
b) additional Grade 13 credits chosen from at least two of B through E, and including at least one credit in either group B or group C. Students wishing to qualify under group C must present at least one of algebra or calculus or functions and relations.
c) Applicants may not present more than three credits in mathematics or two credits in any other subject.

Note 1: An applicant whose first language is not English and who has studied in an English language school system for four years or less, and who enters from a school which does not offer a Ministry approved Grade 13 ESL course may be exempted from the Grade 13 English requirement by passing a recognized test of facility in English, i.e. the University of Michigan English Language Test (minimum score required 90), TOEFL administered by the Educational Testing Service (minimum score required 580), or the Certificate of Proficiency in English issued by the University of Cambridge. In this case the applicant is expected to present six Grade 13 credits, distributed over at least three subject Groups from B-E, in addition to passing the test.

Note 2: Applicants whose first language is not English may be required to write an English facility test whether or not they complete a Grade 13 English course.

Regulations concerning group F
Group F (other subjects): accounting, family studies, law, multidisciplinary studies, other arts studies, physical and health education.

Provided the regulations concerning groups A through E (above) are met, a Grade 13 student may present one credit from group F for admission purposes.

Effective with the admission cycle for 1985, the subjects in group F will not be acceptable.

The following will not be accepted: data processing, marketing and merchandising, other business studies, secretarial practice, technological studies.

An essay-style test of English proficiency is administered to all students after admission to the Faculty of Arts and Science. Students will have repeated opportunities to pass this test during their first two years. It will be necessary to pass it before being admitted into third year.

Bachelor of Arts, Bachelor of Science
Three years.
Fifteen courses over the three-year period. Students are required to complete a major program consisting of at least five and not more than seven courses in one discipline or study area. In addition, three other courses of the 15 must be in disciplines other than those of the major program. Disciplines with major programs are listed under specific subject areas.

Bachelor of Arts, Bachelor of Science
Four years.
Twenty courses over the four-year period. Students are required to complete *one* of the following:
1) A specialist program consisting of at least nine and not more than 13 courses in one discipline or study area.
2) A combined specialist program consisting of at least 14 and not more than 16 courses in two or more disciplines or study areas.
3) Two major programs, each of which consists of at least five and not more than seven courses in one discipline or study area.

In addition, three courses of the 20 must be in disciplines other than those of the specialist or combined specialist disciplines. Disciplines and study areas with specialist and/or combined specialist programs are listed under specific subject areas.

Limited Enrolment
Enrolment in most programs in professional divisions and in some programs offered by the Faculty of Arts and Science is limited. Most of these programs have special entrance requirements in addition to Grade 13 subject requirements (eg., entrance audition, art portfolio, special questionnaires, etc.). The university cannot guarantee acceptance of all qualified applicants to limited enrolment programs; however, applicants will be considered for alternate program and faculty choices where possible.

A minimum of 70% on six appropriate Grade 13 credits is required for general admission consideration to the university. However many divisions require averages considerably higher than the minimum. Some divisions, in their selection process, make use of non-academic criteria (i.e., architecture and landscape architecture, music, physical and health education) and, therefore, occasionally may offer admission to a student who has less than 70%.

Application for Admission
Candidates currently in Ontario Grade 13 should

apply through their high school using the general application form. Applications received from such candidates by the date announced on the application form will be given early consideration. All other candidates should write to the Office of Admissions, giving details of their previous academic work.

Note: University of Toronto calendars are sent to all Ontario secondary schools, and Canadian universities. The admission handbook, *A First Look*, is available upon request from
Office of Admissions
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 1A3

Agricultural and Biological Sciences

• Bachelor of Arts/Bachelor of Science

Three/four year
Available in: biochemistry, biochemistry and chemistry, biogeography, biology, biology/mathematics, biology/physics, biophysical systems, botany, microbiology, nutritional sciences, zoology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Physical and Health Education
The School of Physical and Health Education offers a four-year honours degree program, comprising 21 academic credits plus a maximum of 14 activity courses and two supervised leadership experiences. Students may elect to pursue a Health Science, Sport Studies, Leisure Studies or General Studies emphasis. Those electing the Health Science emphasis will be well prepared for entering the MSc/PhD program in the Exercise Sciences offered by the Graduate Department of Community Health.

Admission requirements
There are no specific Grade 13 subject requirements; however, the School of Physical and Health Education recommends that students take either Grade 13 English or Grade 13 history and physical education. Students intending to pursue the health science emphasis are also recommended to complete Grade 13 courses in physics, chemistry and mathematics. Biology 110 must be included in the first year university program if Grade 13 biology has not been completed. In addition, applicants are required to complete a Physical Activity and Leadership Experience Questionnaire and to submit two letters of recommendation. Students who do not have Grade 13 English at admission will be required to write an English proficiency test. Candidates whose first language is not English may be required to present proof of facility in the English language.

Engineering and Applied Sciences

• Bachelor of Applied Science
The Faculty of Applied Science and Engineering offers a four-year program leading to a Bachelor of Applied Science degree. Eight programs are available: chemical engineering and applied chemistry, civil engineering, electrical engineering, engineering science, geo-engineering, industrial engineering, mechanical engineering, and metallurgy and materials science. The first year is common to all programs except engineering science. Students are required to select one of the above eight programs upon making application.

In the third year engineering science students elect one of the following options: aerospace (the only such program offered in Canada), chemical, computer science, electrical, geophysics, mechanics and materials, nuclear and thermal power or physics.

In third year geo-engineering students elect one of the following options: mineral exploration, mineral engineering, or geotechnical engineering.

The faculty has a two-term system with the academic year divided into two terms, each lasting approximately 16 weeks. Most courses are one-term in duration, with concentration on no more than six subjects at one time; promotional standing is determined at the conclusion of each term. There is provision for students to elect a slightly higher or lower than normal course load; alternately, the first two years of the program may be taken on a part-time basis through Woodsworth College.

Each program consists of core courses in relevant areas of science, mathematics and engineering, plus technical and humanities/social science elective subjects allowing students to specialize in one or more minor fields of interest. The humanities/social science electives provide an opportunity to take courses in the humanities, the social sciences and other courses related to various aspects of professional practice.

Students may choose a co-operative work-study program which involves a concentrated 16-month employment period (the Professional Experience Year) between second and third academic years. This program provides engineering experience in a cooperating industry which is closely related to the students' field of specialization. Fourth-year students who intend subsequently to continue to graduate studies may participate in the Coordinated Bachelor/Master's program which normally permits a significant reduction in the time required for completion of the Master's degree.

Requirements for Admission to the Faculty of Applied Science and Engineering:
Candidates should have completed a full program of study at the Grade 13 level including relations and functions, calculus, algebra, physics and chemistry. Superior students whose programs do not include one of these may also be considered. (Because engineering requires well-developed communication skills and the frequent writing of reports, it is strongly recommended that the sixth credit for admission be a subject requiring literary and writing performance, such as English, history, geography or economics.) Candidates for the engineering science program should have excellent standing. Applicants whose first language is not English may be required to present proof of facility in the English language. After admission, all students must write an English proficiency test unless exemption is granted for satisfactory standing in Grade 13 English. Students with poor test results are required to undertake appropriate action to improve their writing performance.

• Bachelor of Architecture

Five years from senior matriculation.

Admission requirements
Candidates must present relations and functions, calculus, and English/anglais. All applicants are asked to complete a questionnaire and to present a portfolio of their work. Candidates whose first language is not English may be required to present proof of facility in the English language.

• Bachelor of Landscape Architecture

Five years from senior matriculation.

Admission requirements
Candidates must present Grade 13 mathematics (relations and functions, and one additional math credit) and Grade 12 or 13 English/anglais. Candidates are advised to select courses that emphasize technical and creative writing skills. It is also strongly recommended that prospective applicants to the program include studies in geography, biology, art, environmental, social and natural sciences. All applicants are asked to complete a questionnaire. Candidates whose first language is not English may be required to present proof of facility in the English language.

• Bachelor of Science in Forestry

Four years from senior matriculation.
The undergraduate forestry program comprises approximately 75% required courses and 25% elective. The first two years are common to all students. In the third year students are required to elect one of the following options: (1) general forestry or (2) wood science and forest products (which is concerned primarily with the anatomy, physical and chemical properties of wood and their implications for structural and chemical engineering). The areas of interest in the general forestry option are silviculture, land use planning, animal and plant ecology, tree physiology, forest pathology and entomology, timber harvesting and utilization, aerial photography and remote sensing, tree and stand measurement, genetics, and urban forestry.

A work-study program (Professional Experience Year) which involves a 16-month employment period is made available to selected students between the second and third years. It provides them with a unique opportunity to apply the results of their first two years of university education and develop a focus for the remaining two years of academic studies. It may also provide an opening for permanent employment upon graduation.

Admission requirements
Candidates must present Grade 13 chemistry, calculus and either relations and functions or algebra. Candidates whose first language is not English may be required to present proof of facility in the English language.

Fine and Applied Arts

• Bachelor of Arts

Three/four years
Available in: art and art history (Erindale College only), cinema studies, drama (limited enrolment), fine art (history and/or studio), music.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Music

Four years from senior matriculation.
In second-year music, students choose their major field of concentration from one of the following: composition, theory, conducting, history and literature, music education.

Academic requirements
Candidates from Ontario secondary schools must present at least five academic credits at the Grade 13 level, not including Grade 13 music or Royal Conservatory of Music certificates. Candidates whose first language is not English may be required to present proof of facility in the English

language. Applicants should contact the Faculty of Music directly, in January, to request the Faculty's music questionnaire (978-3741).

Musical requirements
a) Major performing medium. All candidates are required to audition. The minimum standard expected is the RCMT Grade 10 (or equivalent) for piano or organ; or Grade 8 in any standard orchestral or band instrument, classical guitar, free bass accordion, historical instruments or voice. The RCMT syllabi should be consulted for guidance in preparing auditions and for the standard expected.
b) Theory. (1) RCMT (or equivalent) certificates: Grade 2 rudiments and Grade 3 harmony, or (2) an admission-placement test of general musicianship.
c) Additional requirement: interview.
d) Keyboard proficiency. Students whose major performance instrument is not piano, will find that a Grade VI (R.C.M.Y.) certificate will assist them in their studies at the faculty. The Faculty of Music does not, however, require proof of certification or an examination in keyboard proficiency.

• Bachelor of Music in Performance

Four years from a four-year high school course.

Academic requirements
Students must present at least five academic credits at either the Ontario Grade 12 level or the Ontario Grade 13 level, or a combination of Ontario Grades 12 and 13 level credits, not including Grade 12 or 13 music or RCMT certificates (or equivalent). Music is highly recommended as a subject but will not be counted in the five credits. Candidates whose first language is not English may be required to present proof of facility in the English language.

Musical requirements
a) Major performing medium. An entrance audition in performance is required of all applicants. Only those showing special talent will be admitted to the course. Candidates may audition on any standard orchestral or band instrument, recorder, piano, organ, harpsichord, classical guitar or voice. Details of the required standard may be obtained from the Admissions Officer of the Faculty of Music.
b) Theory. Same as for Bachelor of Music degree program (see above).
c) Additional requirement: interview.
d) Keyboard proficiency: See Bachelor of Music degree program above.

• Artist and Licentiate Diploma Programs (Faculty of Music)

Three years
Artist diploma: A course to train performers for professional careers.
Licentiate Diploma: A course which combines practical training with instruction in pedagogy to prepare students for careers as private piano teachers.

Academic requirements
Students must present at least five academic credits at either the Ontario Grade 12 level or the Ontario Grade 13 level or a combination of Ontario Grades 12 and 13 level credits, not including Grade 12 or 13 music or RCMT certificates (or equivalent). Music is highly recommended as a subject but will not be counted in the five credits. Candidates whose first language is not English may be required to present proof of facility in the English language.

Musical requirements
a) Major performing medium. Candidates must pass an audition. Superior performing ability is expected. For the Artist Diploma program, candidates may audition on any standard orchestral or band instrument, piano, harpsichord, classical guitar, or voice. The Licentiate Diploma program is available only in piano.
b) Theory. Same as for Bachelor of Music degree program (see above).
c) Additional requirement: interview.

• Bachelor of Science in Art as Applied to Medicine (Medical Illustration)

Three years
An advanced course which is offered to qualified artists.

Admission requirements
Candidates must present a complete academic program at the Grade 13 level, including English and biology. Grade 13 chemistry, Grade 12 art and an arts and science option are strongly recommended. Applicants should also have a minimum of two and a half years of formal studio courses in art; this training should follow high school and should emphasize illustration rather than fine art.

Address inquiries to
Director
Department of Art as Applied to Medicine
University of Toronto
256 McCaul Street
Toronto, Ontario M5T 1W5

Health Professions and Medical Sciences

• Bachelor of Arts/Bachelor of Science

Three four years
Available in: pharmacology, physiology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

• Bachelor of Science in Nursing

Four years from senior matriculation.
Candidates must present Grade 13 English/anglais and chemistry. It is recommended that candidates include studies in biology and mathematics. Canadidates who have studied in an English language school system, for four years or less must achieve an appropriate standard on a recognized test of English facility such as the Michigan Test (90) or T.O.E.F.L. (580). Graduates of Diploma Nursing programs with senior matriculation will be offered optional examinations for advanced standing in the first- and second-year nursing subjects. Address enquiries to the Admissions Officer, Faculty of Nursing, University of Toronto, 50 St. George St., Toronto M5S 1A1.

• Bachelor of Science in Pharmacy

Four years from senior matriculation.

Admission requirements
Candidates must present Grade 13 courses in English, relations and functions, calculus, chemistry, and physics. Candidates whose first language is not English may be required to present proof of facility in the English language. In addition, all applicants must write the Pharmacy College Admission Test (PCAT). The PCAT must be written in February. Information on the test is available in high school guidance offices and from

Faculty of Pharmacy
University of Toronto
19 Russell Street
Toronto, Ontario M5S 1A1

Commencing in 1983, all first year students and second year advanced standing or transfer students entering the Undergraduate Program will be required to write an English Proficiency Test. Students who fail the test on the initial attempt will be required to repeat the test successfully prior to registration in Year III.

Program is not open to foreign students.

• Bachelor of Science (Occupational Therapy), Bachelor of Science (Physical Therapy)

Four years from senior matriculation.
Students enter second year of either program following a year of arts and science in an approved university including the following recommended subjects: two sciences, one of which should be biology; two social sciences, one of which should be psychology; one elective (full course).
Address inquiries to
Department of Rehabilitation Medicine
University of Toronto
256 McCaul Street
Toronto, Ontario M5T 1W5

• Doctor of Dental Surgery
Four years following completion of a minimum of one year full-time university study at a level beyond Ontario Grade 13. This year must include courses in biology (or zoology), chemistry and physics which are acceptable to the faculty. Applicants must also take the Canadian Dental Association's Dental Aptitude Test.
Inquiries should be addressed to
Admissions Office
Faculty of Dentistry
University of Toronto
124 Edward Street
Toronto, Ontario M5G 1G6

• Doctor of Medicine
Four years following completion of:
a) a minimum of two or three years in a degree program in a Canadian university, after completion of Ontario Grade 13 or equivalent, and obtaining appropriate credit in the prerequisite subjects* *or*
b) a bachelor's degree from a recognized university, and obtaining credit in the prerequisite subjects*.

All applicants to the medical course must write the Revised Medical College Admission Test (MCAT) by the fall of the year preceding the proposed year of entry into the medical course. Applications for this test should be submitted not later than one month prior to the date of the test. Information and applications for the Revised MCAT may be obtained from the Student Affairs Office, Faculty of Medicine, or by writing to: New MCAT Registration, American College Testing Programme, P.O. Box 414, Iowa City, Iowa 52240, U.S.A.

*All applicants are required to have satisfactorily completed the following courses:
Biology or zoology (with lab): one full-year course either in Grade 13 or advanced level, or in an appropriate university level course.
Physics (with lab): one full-year course either in Grade 13 or advanced level, or in an appropriate university level course.
General chemistry (with lab): a university course of one year's duration. Quantitative or qualitative analysis and physical chemistry are acceptable.
Organic chemistry (with lab): a university course of one year's duration.

Preference is given, in the selection process, to Canadian citizens and permanent residents who reside in Ontario.
Address inquiries to
Associate Dean
Student Affairs
Faculty of Medicine
University of Toronto
Toronto, Ontario M5S 1A8
Telephone (416) 978-2717

Humanities and Related Courses

• Bachelor of Arts/Bachelor of Science

Three/four years
Available in: Catholic studies, classics (Greek and Latin), English, French, German, history and philosophy of science and technology, Italian, philosophy, religious studies, Spanish and Portugese.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

• Theology
Courses are offered by Emmanuel College (United Church), Knox College (Presbyterian), St. Michael's College (Roman Catholic), Trinity and Wycliffe Colleges (Anglican). Inquiries should be directed to the head of the college concerned c/o of the University of Toronto, Toronto, Ontario M5S 1A3.

Mathematical and Physical Sciences

• Bachelor of Arts/Bachelor of Science

Three/four years
Available in: actuarial science, astronomy, chemistry, computer science, geology, mathematics, mathematics/biology, physics, physics/biology, statistics, survey science (Erindale College only).

Admission requirements
See "General Admission Requirements, Bachelor of Arts/Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts/Bachelor of Science

Three/four years
Available in: African studies*, anthropology, Canadian studies*, Celtic studies*, Christianity and culture*, commerce, criminology, East Asian studies (Chinese, Hindi, Japanese, Korean, Sanskrit)*, economics, education and society, environmental studies, geography, history*, history and philosophy of science and technology*, international relations, Latin American studies*, medieval studies*, Middle East and Islamic studies*, Near Eastern studies (Assyriology, Egyptology, Hebrew, Jewish studies)*, native studies*, political science, psychology, Slavic studies (Czech, Slovak, Hungarian, Polish, Russian, Serbo-Croatian, Ukrainian)*, sociology, urban studies, women's studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

• Bachelor of Commerce

Four years
Twenty-three courses over four years. Students are required to complete a commerce and finance program consisting of not more than 17 courses in the 23-course program. In addition, at least four courses must be in disciplines other than those in the commerce and finance program. Enrolment in the Bachelor of Commerce program is restricted. Entry is dependent on achievement in first year courses.

Admission requirements
See "General Admission Requirements, Bachelor of Commerce".

• Bachelor of Laws
Three years following at least two years of academic study beyond senior matriculation (at least five years from senior matriculation).
Address inquiries to
Office of Admissions
Faculty of Law
University of Toronto
Toronto, Ontario M5S 1A1

Special Programs

• Transitional Year Program
The Transitional Year Program (TYP) is a one-year full-time course of studies for students who have the potential for pursuing a university education but are blocked from admission to university through lack of qualifications. Each year TYP enrols a limited number of promising students who had either earlier dropped out of high school for social or financial reasons or had received diplomas in courses other than the normal university admission stream and are thus academically unprepared for university.

Priority in admission is given to people who clearly have not had a fair chance to qualify for university entry. The program's Admissions Committee regards socio-economic factors such as family income and parents' education in determining whether there were conditions which may have prevented the individual from staying in school despite academic ability.

Students in the program are generally at least 19 years old and typically have been in the work force for at least one year. Applicants are expected to be able to indicate why the Transitional Year Program would be the only route through which they could achieve admission to university.

Students are enrolled for one academic session (September to April) in a special program whose aims are:
(a) to provide the student with the basic learning and communication skills necessary for university;
(b) to give the student exposure to the organized approaches to ideas and problems which characterize social science and humanistic studies;
(c) to help the student obtain course credit in one university subject as part of the student's future university program.

Students in the program are eligible for awards from the Ontario Student Assistance Program (OSAP).

For further information about the program, please phone (416) 978-6832.

Residence
Undergraduate
If, on their application for admission, students indicate an interest in residence, they will automatically be sent an application for residence accommodation. Further inquiries about available accommodation should be addressed to one of the following appropriate officials

Director of Residences
University College

Dean of Men or Dean of Women
Victoria College

Dean of Men or Dean of Women
Trinity College

Dean of Men, St. Michael's College, or
Dean, St. Joseph's College (Women)
90 Wellesley Street West
Toronto, Ontario M5S 1C5, or

Dean, Loretto College (Women)
70 St. Mary Street
Toronto, Ontario M5S 1J3

Dean of Men or Dean of Women
New College

Residence Co-ordinator
Innis College

Administrative Assistant
(Residences)
Room S3031
Scarborough College
1265 Military Trail
West Hill, Ontario M1C 1A4

Director of Student Affairs
Erindale College
3359 Mississauga Road
Mississauga, Ontario L5L 1C6

Secretary to the Dean (Men's Residence)
Devonshire House

Fees
For 1982-83 the total cost of residence accommodation including meals ranged from approximately $2 400 to $2 700 per session (September to May).

For assistance in finding other accommodation, students should contact
University Housing Service
49 St. George Street
Toronto, Ontario M5S 1A1

A variety of residence accommodation is offered by the two independent residences listed below. They have no official connection with the university. Inquiries should be made directly to
Campus Co-operative Residence Inc.
395 Huron Street
Toronto, Ontario M5S 2G5

Tartu College
310 Bloor Street West
Toronto, Ontario M5S 1W4

Scholarships and Financial Assistance
Students in financial need may apply for assistance from a variety of sources. Detailed information concerning government assistance is provided in the "Financial Assistance to Students" section of *Horizons*.

The university, its colleges and faculties offer scholarships, bursaries and emergency loans. Information concerning admission scholarships is available in all Ontario secondary school guidance offices. Students who are not enrolled in an Ontario secondary school or who wish information concerning other types of assistance should contact the Student Awards Office, Simcoe Hall, University of Toronto.

Tuition Fees 1983-84
Arts and science $220.50 per course plus college membership and incidental fees
Applied science and engineering ($1 197.50 plus $255 for incidental fees) $1 452.50
Architecture ($1 197.50 plus $168 for incidental fees) $1 365.50
Art as Applied to Medicine ($1 102.50 plus $163 for incidental fees) $1 265.50

*For the purposes of the University of Toronto, this course falls under the Humanities heading.

Dentistry (1st year), ($1 402 plus $156 for incidental fees plus instruments fee) $3 608
Forestry ($1 102.50 plus $157 for incidental fees) $1 259.50
Landscape architecture ($1 197.50 plus $169 for incidental fees) $1 366.50
Law ($1 102.50 plus $169 for incidental fees) $1 271.50
Medicine (1st year), ($1 402 plus $30 microscope fee and $163 for incidental fees) $1 595
Music ($1 102.50 plus $142 for incidental fees) $1 244.50
Nursing ($1 102.50 plus $155 for incidental fees) $1 257.50
Pharmacy ($1 102.50 plus $154 for incidental fees) $1 256.50
Physical and health education ($1 102.50 plus $144 for incidental fees) $1 246.50
Physical and occupational therapy ($1 102.50 plus $154 for incidental fees) $1 256.50

Fees for new foreign students
Physical and health education, music, law, rehabilitation medicine $4 160 plus incidental fees. All other programs $6 775 plus incidental and other fees where applicable.
All fees are approximate and subject to change without notice.

Further Information
Inquiries about admission requirements should be addressed to
Office of Admissions
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 1A3
Telephone (416) 978-2190

Inquiries about University of Toronto information programs for secondary schools should be addressed to
Alan Hill
Assistant Director of Admissions
(Secondary School Liaison)
Office of Admissions
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 1A3
Telephone (416) 978-2771

Inquiries and requests for application forms for student awards should be addressed to
Office of Student Awards
Simcoe Hall
University of Toronto
Toronto, Ontario M5S 1A1
Telephone (416) 978-2204 OSAP and other financial assistance
Telephone (416) 978-2197 scholarships

Erindale Campus University of Toronto in Mississauga

Principal: Paul Fox

One hundred and fifteen modern, fully furnished townhouses provide 522 students with the least expensive university campus accommodation in Ontario.

General Admission Requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science, Bachelor of Commerce."

Programs Offered
Erindale offers courses leading to three- and four-year Bachelor of Arts or Bachelor of Science degrees and a four-year Bachelor of Commerce degree. Students electing to follow a three-year program will take a major concentration in a discipline or an approved area of study, while those choosing a four-year program will specialize in a discipline or complete two major areas of concentration. Students will also select, at some point in their program, at least one course from each of the academic divisions of humanities, physical and life sciences, and social sciences.

Humanities: classics, drama, English, fine art, French, German, history, Italian, linguistics, philosophy, religious studies, Slavic studies and Spanish. Physical and Life Sciences: astronomy, biology (botany, microbiology, zoology), chemistry, computer science, earth and planetary science, mathematics, physics, psychology, statistics and survey science. Social sciences: anthropology, commerce, communications, economics, geography, political science and sociology.

Students may choose from a broad range of specialist and major programs, including a number of unique programs that are sponsored by Erindale. The following listing outlines these special programs.

Art and art history provides an excellent initial training for careers in art galleries and museums, for advanced study of the history of art and art conservation, for freelance art careers and for the teaching of art in Ontario schools. Students earn both a University of Toronto degree and a diploma of Art and Art History from Sheridan College. Please note that applications must be submitted to both the University of Toronto and Sheridan College.

Survey science is the science of measuring and representing geometrical and physical features of the environment. The program at Erindale includes subjects such as land surveying, geodesy, photogrammetry, remote sensing and cartography.

The four-year specialist program, which is fully approved by the Association of Ontario Land Surveyors, leads to the BSc degree. Effective 1983, English, relations and functions, calculus, algebra and physics will be mandatory for entry into survey science.

In addition to survey science and art and art history, such programs as the joint psychology and biology program in animal behaviour and the specialist programs in exceptionality in human learning, and earth and planetary sciences offer subject emphasis not available elsewhere within the university.

Approved Areas of Study
The following inter-disciplinary approved areas of study are available at Erindale Campus: renaissance studies, population and society, native studies, Latin American studies, crime and deviance, Canadian studies, earth resources, exceptionality in human learning, material culture, and urban studies.

Library
Erindale's undergraduate library is one of the best. Spacious, attractive and comfortably furnished, it holds over 190 000 books, an array of 955 current journals and periodicals, and offers an efficient book delivery system that allows students access to the five million volumes in the university's library collection.

Scholarships, Awards and Financial Aid
Special scholarships are available at the Erindale Campus, in addition to the general awards available to all University of Toronto students. These include the Chancellor's Scholarships ($1 500 each) and the Dean's Scholarship ($1 200 each). All are awarded annually on the basis of high academic standing in Grade 13, and are renewable for three more years provided "A" standing is maintained.

Further Information
Campus visits and general information
Ms. Tennys Reid or Miss Marion Zimmer
Telephone (416) 828-5217

Academic counselling and help with program selection
Mrs. Marjorie Cooper or Ms. Mary Alice Beyer-Gammon
Telephone (416) 828-5331

Academic counselling and help with program selection for Part-time studies
Dr. Les McCormick
Telephone (416) 828-5244

For further information on scholarships and awards contact
Mrs. Linda Weber
Telephone (416) 828-5234

For information about residence contact
The Housing Office
Telephone (416) 828-5279

Scarborough College West Hill

Principal: Joan E. Foley

Three- and four-year programs are available in most major disciplines in the humanities, sciences and social sciences (including commerce). Students who wish to complete a four-year degree complete either a specialist program in one discipline (or area of study) or less specialized major programs in two areas of study. Students who wish to complete a three-year degree complete a major program in one area. Programs are offered in several interdisciplinary areas (such as Canadian studies or renaissance studies) in addition to the traditional disciplines. Outside of their specialist or major areas, students have extensive freedom of choice of courses, and the requirements of most programs give students ample opportunity to study in other areas of intellectual interest.

A co-operative program in administration is offered to a limited number of students who would like to prepare for careers in administration either in the public or private sector. This program combines eight terms of study (in such areas as commerce, economics and political science) with four terms of work experience. Students may apply for admission to this program directly from Grade 13, or alternately may apply after their first-year (provided that they have completed appropriate courses). A brochure which fully describes this program is available.

Residence accommodation is provided for 250 students in furnished self-contained townhouses each housing four to six students. The student village is largely self-governing, and a real sense of community characterizes village life.

General Admission Requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

Programs Offered

- **Bachelor of Arts (BA) – 3 or 4 years**

- **Bachelor of Science (BSc) – 3 or 4 years**

Tuition Fees 1983-84 (including incidental fees)
Canadian citizens and permanent residents: $242.50 per course.

Further Information
For further information, applications, or arrangements to visit the college, please write or telephone
Ms. Susan Martin
Admissions/Liaison Counsellor
Scarborough College
1265 Military Trail
West Hill, Ontario M1C 1A4
Telephone (416) 284-3359

Trent University

Peterborough

President: Donald F. Theall

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	2 400	38
Part-time	1 230	4

General Admission Requirements
In order to be eligible for admission to Trent University, an applicant is required to achieve standing at a level acceptable to the university in a full Grade 13 program of studies. Because of the diversity of programs offered in secondary schools in Ontario, a full program is defined as that which is deemed by the school principal to be satisfactory for the purpose of granting an Ontario Secondary School Honour Graduation Diploma.

With the exception of some language programs, there are no specified subject requirements for admission to arts programs. Applicants to science programs are advised to consult the Grade 13 requirements of individual disciplines as shown in the courses of study section of the Trent University calendar.

Students entering the administrative and policy studies program must have completed Grade 12 mathematics at the advanced level or its equivalent with a good standing. It is recommended that the applicant have one of Grade 13 functions and relations, calculus or algebra.

Applicants should refer to the calendar for information about admission and program requirements for the Trent-Queen's teacher education program and the administrative policy studies program.

Agricultural and Biological Sciences

- **Bachelor of Science**

Three-year general/four-year honours
Available in: biology.

Admission requirements
See "General Admission Requirements".

Education/Physical Education/Recreation

- **Concurrent Teacher Education**

An innovative approach to teacher education which is run co-operatively with Queen's University at Trent, this program enables students to study towards a Bachelor of Arts or Bachelor of Science degree, and to fulfil the requirements of the Bachelor of Education degree at the same time, while practice-teaching in local elementary or secondary schools in each year.

Humanities and Related Courses

- **Bachelor of Arts**

Three year general
Available in: cultural studies, English, French, German, Greek, Latin, philosophy, Spanish.

- **Bachelor of Arts**

Four-year honours
Available in: English, French, German, Greek, Latin, philosophy, Spanish.

Admission requirements
See "General Admission Requirements".

Mathematical and Physical Sciences

- **Bachelor of Science**

Three-year general/four-year honours
Available in: chemistry, mathematics, physics.

Admission requirements
See "General Admission Requirements".

Social Sciences and Related Courses

- **Bachelor of Arts**

Three-year general
Available in: anthropology, classical studies*, comparative development studies, computer studies, economics, environmental and resource studies, geography, history*, native studies, politics, psychology, sociology.

- **Bachelor of Arts**

Four-year honours
Available in: administrative and policy studies, anthropology, Canadian studies, classical studies*, comparative development studies, economics, environmental and resource studies, geography, history*, native studies, politics, psychology, sociology.

- **Bachelor of Science**

Three-year general/four-year honours
Available in: anthropology, economics, environmental and resource studies, geography, psychology.

Admission requirements
See "General Admission Requirements".

- **Bachelor of Administrative Studies**

The program in administrative and policy studies is designed to provide students with a grounding in various administrative practices such as accounting, marketing, management science, computer science, commercial law, and statistics. Students are required to develop skills in effective communication and in long-range policy making in preparation for broad career areas in government and industry. This is a four-year program leading to the degree of Bachelor of Administrative Studies.

Canadian studies
The Canadian studies program looks critically and analytically at many aspects of Canadian life from a variety of perspectives within traditional disciplines and core courses. In addition to 30 core courses, about 60 support courses are offered in 11 different areas.

Native studies
The native studies program deals with the problems, culture, languages and history of Canadian native peoples in 29 course offerings.

Environmental and resource studies
The environmental and resource studies program considers resource management and environmental problems in a Canadian context. The program offers both BSc and BA streams.

Comparative development studies
The comparative development studies program involves the comparative examination of socie-

*For the purposes of Trent University, this course falls under the Humanities heading.

ties and culture undergoing rapid change and their relationship to the industrialized world.

Cultural Studies
Cultural studies examines the interplay between culture and the arts through an analysis of the social conditions which shape creative thought and expression. Over 30 courses are available in several areas: film, criticism, drama, literature, and visual arts.

• General Degree
In 1970, the Special Emphasis Program was introduced at the ordinary and honours levels to meet the needs of students who choose to take a broad range of subjects rather than major in one or more particular disciplines. Students may undertake independent study in such areas as: archaeology and the ancient world, business studies, Canadian-American relations, child studies, comparative social inequality, development of Western thought, educational studies, freshwater studies, human biology, international trade and development, legal studies, nineteenth century studies, quantitative methods, regional development and planning, renaissance and reformation studies, religious studies, social services and native people, studies in Canadian literature and culture, studies in international relations, studies in labour relations, studies in political economy, studies in satire, urban studies, and women's studies.

• French, German and Spanish Study Abroad
Trent students can study abroad, for an academic year, regular Trent language courses with a Trent professor for Trent credits at the following universities: Nantes (France), Freiburg (West Germany), and Palma de Mallorco (Spain). Students can also take courses with European students for credit and will benefit from all the facilities offered the normal European student – subsidized meals and accommodation, cultural trips, cheaper transportation. The cost of the whole year abroad, including accommodation, will not normally exceed that of a year in residence at Trent and can be reduced considerably in Freiburg and Nantes by students who wish to earn money during the holidays. These programs are especially recommended for honours candidates. Inquiries should be directed to the chairman of the appropriate department.

• Trent University International Program
The International Program is addressed to prospective university students of all nationalities, who wish to enrich their education by studying as members of an integrated group of young men and women drawn from many different countries and regions, by acquiring knowledge and understanding of global and regional problems, and by developing the abilities that will enable them to serve the needs of their people and the international community more effectively.

Students who enroll in the Program will have a normal choice of the courses offered at Trent. They must be proficient in more than one language, and those whose mother-tongue is English and who are not already bilingual must study a second language for at least two years. They will live in college during their first year, and be involved in a *Colloquium on World Affairs* twice a week which will be open to all members of the University. About one quarter of the students in the program will be Canadians, and these students will be expected to provide a link between those from other countries and the local community.

Interested students should consult the Trent Calendar for information on admission requirements.

Residence
In keeping with the importance Trent places on the establishment of a university community, about half of Trent's students live in residence. Trent houses 1 100 students in the five residential colleges: two in the city of Peterborough and three on the main campus. These residences offer a variety of accommodation ranging from Victorian mansions to the most modern residence complexes. Most of the rooms (81%) are singles. Normally the university can accommodate about 600 year I students in the residential colleges. Non-resident members of the colleges enjoy full use of college facilities and take an active part in college life.

Fees 1983-84
(including meals)
Single $2 815
Double $2 675
Townhouse (excludes meals) $1 535
College affiliation fee for non-residents $90

Scholarships and Financial Assistance
The university has a generous program of scholarships and assistance to students entering first or higher years with first class standing. Students of exceptionally high achievement and promise may be awarded a Champlain Scholarship which has an annual value equal to the cost of tuition and residence. The university calendar, available in most libraries and guidance offices, provides further details of Trent University's program of scholarships, awards and bursaries.

Students in financial need may apply for assistance from a variety of sources. Government assistance, available to full- and part-time students, is explained in the introductory section on financial assistance. Students should also check with the university's Financial Aid Office.

Tuition Fees 1983-84
(including incidental fees)
Tuition $1 408.25

Further Information
Inquiries are welcome and should be directed to
A.P. Saxby
Director of Admissions
Trent University
Peterborough, Ontario K9J 7B8

Inquiries about student awards should be directed to
Vivian Kidd
Financial Aid Officer
Trent University
Peterborough, Ontario K9J 7B8

University of Waterloo

Waterloo

President: D.T. Wright

Enrolment 1981-82

	Undergraduate	Graduate
Full-time	14 509	1 311
Part-time	6 498	462

Faculties, Schools and Institutes
Faculty of Arts
Faculty of Engineering
Faculty of Environmental Studies
Faculty of Human Kinetics and Leisure Studies
Faculty of Mathematics
Faculty of Science

General Admission Requirements
For all programs, the university normally requires completion of a Grade 13 program including at least six Grade 13 credits leading toward the Ontario Secondary School Honour Graduation Diploma, with a minimum 60% overall average. The university expects to fill the majority of places available to Grade 13 applicants by using the following criteria:
a) Grade 13 interim or final standing,
b) Grade 12 final standing,
c) school official's comments,
d) personal information supplied by applicant,
e) references and interviews where required.

Applicants whose interim standing is not sufficient for admission will be considered on the basis of the Grade 13 final standing and qualified applicants will be admitted until the remaining places are filled.

Bachelor of Arts
The Faculty of Arts operates under the term-course system whereby students' progress toward a degree is measured by term courses successfully completed.

Students may obtain a Bachelor of Arts degree by following a general program with major (successful completion of 30 term courses as specified by the department), a four-year general program with a major possible in several different departments (successful completion of 40 term courses as specified by the department), or an honours program (successful completion of 40-48 term courses as specified by the department). Following the completion of year one, students may declare a general or honours major. Co-operative programs leading to an Honours Bachelor of Arts degree are also available.

There are no double majors or minors in the general program. Options are available with a general or honours program. Students in an honours program may have a minor concentration consisting of 10 term courses successfully completed. Joint honours programs are available.

General and honours majors and options available are listed under specific subject areas.

An arts student may also graduate with a general arts degree (non-major) upon completion of 30 term courses. Any normal first-year arts program will satisfy the needs of a student contemplating a general arts (non-major) program. The Arts Faculty Undergraduate Office advises students in general non-major programs.

Students applying for admission to general arts are required to present a minimum overall

average of 60% in six Grade 13 credits. Students applying to honours arts co-op (year I) must present a minimum overall average of 70% in six Grade 13 credits in order to be eligible for consideration for admission. All applicants to Honours Co-op Accountancy Studies must present a minimum average of 70% in six Grade 13 subjects to be eligible for admission. All first-year Faculty of Arts programs have limited enrolment. In recent years there have been more applicants to Arts than places available; the minimum average required for admission to all Arts programs has been greater than 60%. It is recommended that applicants to arts include Grade 13 courses such as English, history and languages (other than English) in their program. Advanced English courses, particularly those that stress writing skills, are recommended. Applicants considering majors in accounting or in social sciences such as economics, geography and psychology are strongly advised to include Grade 13 mathematics courses in their program.

First-year program
In Year One students select an exploratory program of ten to twelve term courses. Students admitted to year one general arts may proceed at the end of the year to regular general or honours major programs or into an honours co-operative program with a major in one of the following: anthropology, applied economics, English, political science, political science (administrative studies option), psychology or sociology.

Students admitted to arts co-op in year one are required to select twelve term courses in first year six of which are required from the applied studies package. At the conclusion of year one, arts co-op students select an honours major and, if in good standing, proceed into honours applied studies co-op. As well, students admitted to year one arts co-op may choose to proceed into a regular general or honours program or into one of the departmental co-op programs listed above.

Students applying to arts co-op accountancy studies will be admitted either to one of: honours co-operative chartered accountancy studies or honours co-operative management accountancy studies or to year one regular arts from which the student might proceed to regular honours chartered accountancy studies or regular honours management accountancy studies. Students in either co-op accountancy studies program select 12 term courses in Year One (6 in each term) as specified by accounting.

Bachelor of Science
The Faculty of Science operates under the course credit system where student progress is measured in terms of courses completed.

The three-year general science program requires a total of 15 course-credits. It is not necessary that a student designate a major subject.

In the honours programs in science a minimum of 22 course-credits is required with a specialization.

In addition to the general university requirements, students must present 2 science courses, one of which must be chemistry or physics, calculus and one of algebra or relations and functions.

Students planning to major in biology or earth sciences/geography programs must include Grade 13 chemistry. Those planning to major in any chemistry, optometry, or other earth sciences program must include both Grade 13 chemistry and physics. Students planning to major in physics programs must include Grade 13 physics.

Applicants to all science programs are advised to select both Grade 13 chemistry and physics courses. A course requiring writing skills would be an asset. For co-operative applied chemistry and physics, Grade 13 relations and functions and algebra are both recommended. For the geophysics option within co-operative applied earth sciences, Grade 13 algebra is recommended.

Recommendations for Admission
The university has recommended that certain courses be included in the applicants' Grade 13 programs. Applicants will benefit by having these courses as background for their first year of studies, but their admission will not be jeopardized if they have not taken these recommended courses.

Where specific requirements are stated applicants must include these requirements in their Grade 13 program.

Applicants who have spent more than the normal length of time in secondary school to complete their university preparation may be required to present a higher average for admission.

Because many of the programs offered at the university have limited enrolment, the possession of the minimum requirements does not guarantee admission to any of the programs.

Regular and Co-operative Systems of Study
As well as the regular program of studies where students take courses and exams from September to April, all faculties offer extensive co-operative programs. Students enrolled in the co-operative programs alternate academic terms on-campus with work terms in business, industry or government. The study and work terms are each four months long. The Department of Co-ordination and Placement makes the necessary arrangements for the work terms.

Agricultural and Biological Sciences

• Bachelor of Science

Four-year honours
Available in: biology, biology and chemistry (combined), biology and man-environment studies.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Engineering and Applied Sciences

• Bachelor of Applied Science
The Bachelor of Applied Science degree is offered through the Faculty of Engineering. Six honours programs in engineering are available: chemical, civil, electrical, geological, mechanical and systems design. All programs are offered in the co-operative system of study. The Bachelor of Applied Science program is four and two-thirds years in length. In the first year, programs are designed to prepare the student for specialized work in advanced years of the six different programs. The first-year programs are sufficiently similar that a student can apply to transfer into the second year of a different program.

Admission requirements
In addition to the overall university requirements, students must present a 60% minimum average in relations and functions, calculus, algebra, physics and chemistry. There are more applicants than places available and this competition results in an average significantly greater than 60% being required for admission. Applicants with Grade 13 averages above 80% are given first consideration; however, a number of students with lower averages are admitted when other evidence indicates an aptitude and interest in engineering or extensive participation in extra-curricular activites while in Grade 13.

Applicants lacking one or two of the five specific Grade 13 requirements but whose Grade 13 average is more than 85% should contact the admissions officer no later than January (for September admission). Applicants will be evaluated and advised on possible courses of action required to meet our specific requirements. First year enrolment is limited to 700 students.

Because engineering requires considerable writing of reports and reviews, as well as the reading of books, articles and journals, the sixth credit for admission should be a subject requiring literary and writing performance such as English, history or geography.

• Bachelor of Science

Four-year honours
Available in: earth sciences (geology option), earth sciences (geography option).

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Fine and Applied Arts

• Bachelor of Arts

Three-year general (with major)/four-year honours
Available in: drama and theatre arts, fine arts (studio, history, film studies options), music.

• Bachelor of Arts

Four-year general
Available in: fine arts (options in studio, art history).

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Health Professions and Medical Sciences

• Doctor of Optometry
This is the only English-language optometry program in Canada. Students may apply to enter after a minimum of one year of the general science program, although the majority of applicants are accepted after two or more years of university. It is a four-year professional program, and because enrolment is limited to 60 students per year, applications to the first professional year are considered on a competitive basis involving academic and non-academic selection criteria. Graduating students receive a Doctor of Optometry degree (O.D.). The program is accredited by the Council of Education of the American Optometric Association.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Humanities and Related Courses

• Bachelor of Arts

Three-year general (with major)
Available in: classical civilization, English, French, German, Greek, history, Latin, philosophy, religious studies, Russian, Spanish.

• Bachelor of Arts

Four-year general (with major)
Available in: classical civilization, English,

French, German-Russian/scientific translation, history, philosophy, religious studies, Russian-German/scientific translation, Spanish.

• Bachelor of Arts

Four-year honours
Available in: Classical studies, English, French, German, history, Latin, philosophy, religious studies, Russian, Slavic studies, Spanish.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Mathematics
The Faculty of Mathematics offers undergraduate programs leading to the following Bachelor of Mathematics degrees: BMath Honours, BMath General, BMath Pass. The honours program is designed for students who wish to concentrate their studies in particular areas of the mathematical sciences. The general program, on the other hand, is more suitable for students with a definite interest in mathematics who wish to avoid the specialization of the honours program. The pass program is a relatively non-specialized course of study intended primarily for students who wish to pursue a more general education and include a larger number of non-mathematics electives in their programs. It could also be chosen by those wishing to take a substantial number of mathematics courses but who, for one reason or another, wish to complete their degree in three years.

The honours program is more demanding than the general and pass programs. In addition to requiring that the honours versions of faculty core courses be taken, the standard course load for an honours program beyond first year is six courses compared to five for the general and pass programs. Further, the BMath Honours degree requires higher graduating averages and a greater degree of specialization than the BMath General and BMath Pass degrees. Students who enrol in a general program are not required to meet the specific departmental requirements in upper years that must be satisfied by those in departmental honours programs.

All mathematics students take algebra, calculus, computer science plus three non-mathematics courses in first year. This commonality of curriculum (which continues in year two) permits considerable flexibility for students to change from one academic program to another within the faculty of mathematics. In fact, if non-mathematics courses are judiciously chosen, this flexibility extends to many programs in other faculties.

All BMath honours programs, are available in both the regular and co-operative systems of study. (The academic requirements for corresponding regular and co-operative programs are identical.) BMath general and pass programs, however, are available only in the regular system.

The following departmental honours programs are available: actuarial science, applied mathematics (including applied mathematics with computer science), co-op applied mathematics with engineering electives, combinatorics and optimization, computer science, co-op computer science with electrical engineering electives, co-op computer science and information systems option, operations research, pure mathematics (including pure mathematics with computer science or statistics), statistics (including statistics with computer science), plus numerous combination honours programs both within the faculty of mathematics and with departments in other UW faculties (e.g. honours pure mathematics and philosophy).

The following mathematics programs with specialized options are also available: mathematics/business administration option, mathematics/chartered accountancy option, mathematics/management accounting option, mathematics/teaching option.

The constantly increasing complexity of business organizations has created a demand for persons trained in analyzing business and accounting problems from a mathematical point of view. The faculty of mathematics in co-operation with the school of business and economics at Wilfrid Laurier University, the Accounting Group and the Department of Economics and Management Sciences at Waterloo, offers three unique programs combining mathematics with business administration, chartered accountancy and management accounting. Each of these is designed so that students gain an appreciation for the applications of mathematics to commerce and gain experience in areas such as banking, marketing, production control, accounting, auditing, etc. All three options are available in both the regular and co-operative systems of study.

The chartered accountancy and management accounting programs are offered in co-operation with the Institute of Chartered Accountants of Ontario and the Society of Management Accountants of Ontario, respectively. Graduates of the chartered accountancy program will normally have completed all formal university course work required by the Institute. The other principal requirements for the CA designation include two or three years work experience in public accounting and successful completion of the national institute's uniform final examinations. The management accounting program is structured so that successful completion of the program qualifies a student for 12 RIA exemptions and also to write three of the Society's six uniform national examinations.

Co-operative work terms are accepted by both the Institute and the Society as part of their respective internship requirements. Thus, co-op graduates are able to complete all Institute or Society requirements in as little as one year after graduation. Graduates of the regular program are able to complete all such requirements in as little as two years after graduation.

The co-operative mathematics teaching option is a uniquely integrated program involving the Faculty of Mathematics and the Faculty of Education at the University of Western Ontario. This program combines a sound academic program in mathematics, work experience in business and industry, teaching experience in Ontario secondary schools and professional training in education. Graduates obtain a BMath degree from Waterloo and emerge as fully qualified secondary school mathematics teachers in Ontario.

Students interested in the teaching option should enrol in any one of the Faculty of Mathematics non-teaching co-operative programs. Admissions to the Teaching Option Co-operative program occurs in year two on the basis of good academic work and success in an interview process.

Admission Requirements
In addition to a 60% minimum overall average requirement on six Grade 13 credits, applicants to the Faculty of Mathematics must normally submit a minimum grade of 60% in each of calculus, algebra, and functions and relations, to be eligible for admission consideration. Students with high overall academic standing, who are missing one of the three specified mathematics requirements, may be considered for admission in exceptional circumstances. Such students should contact the Assistant Registrar, Faculty of Mathematics, as soon as possible, to discuss their particular situation. Since programs in the Mathematics Faculty require considerable writing of reports and reviews as well as the reading of books, articles and journals, one of the non-math credits for admission should be a subject requiring literary and writing performace such as English, history or geography.

All mathematics programs are limited enrolment programs. Consequently, since the purpose of the university's admissions process is to admit the best qualified applicants, students whose averages are close to the minimum requirements cannot be certain of admission. Admissions cutoff averages each year are a function not only of the number of spaces available, but also of the quality and quantity of applicants. Competition for admission to mathematics programs has been keen in recent years, with the result that most of the students admitted have had Grade 13 averages in excess of 75%. Nevertheless, students with lower averages may be admitted if there is evidence to indicate an exceptional aptitude and interest in mathematics.

Applicants not offered admission to the program of their choice are automatically considered for admission to all other mathematics programs.

Applicants to the co-operative programs must be Canadian citizens or permanent residents. Furthermore, applicants whose native language is not English will be expected to satisfy English language requirements, and to this end, they are required to write The Test of English as a Foreign Language (TOEFL). This language requirement applies to both regular and co-op applicants.

For complete information, consult the university undergraduate calendar and/or contact the Assistant Registrar, Faculty of Mathematics, in Needles Hall.

• Bachelor of Science

Four-year honours
Available in: chemistry and biology (combined), chemistry (options in environmental studies, mathematics, physics), physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general (with major)
Available in: anthropology, classical civilization*, economics, geography†, history*, medieval studies*, political science, psychology, social development studies (Renison College), sociology.

• Bachelor of Arts

Four-year general (with major)
Available in: economics, geography, political science, psychology (ECEC).

• Bachelor of Arts

Four-year honours
Available in: accounting‡, anthropology, chartered accountancy studies (economics option)‡, classical studies*, economics, geography†, history*, management accountancy studies (economics option)‡, medieval studies*, political science, political science (administrative studies option), psychology, psychology (early childhood education option), slavic studies, social development studies (Renison College), sociology.

• Bachelor of Arts

Options only
Canadian studies, legal studies, management studies, peace and conflict studies, personnel and administrative studies, and studies in personality and religions are options which may be combined with certain other Bachelor of Arts disciplines. Please consult university calendar for details.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Environmental Studies
The Faculty of Environmental Studies is comprised of two professional schools (School of Architecture and School of Urban and Regional Planning) and two academic departments (man-environment studies and geography).

Students may be granted a Bachelor of Environmental Studies degree in the following programs: honours geography – four years, five years co-operative system; major in geography (general degree) – three years or four years; honours in man-environment studies – four years, five years co-operative system; honours in urban and regional planning – four years; architecture (pre-professional program) – three years co-operative system.

The professional Bachelor of Architecture degree is granted after two additional years of study following the completion of the Bachelor of Environmental Studies/Architecture pre-professional program. The professional Bachelor of Architecture program is on the rotating work/study co-operative system only.

Admission requirements
It is recommended that students present at least one Grade 13 mathematics course for admission to programs in environmental studies. While not obligatory, Grade 13 geography is recommended for the geography program. The first year class in man-environment studies consists of approximately 70 students.

For specialization in architecture, students must have successfully completed the Ontario Secondary School Honour Graduation Diploma. The specific Grade 13 requirement is a 60% overall average in relations and functions, calculus, physics and English (français).

Selected applicants to the architecture and urban and regional planning programs are normally required to attend an interview at the university. For architecture, admission is based on the results of the interview, an English writing exercise designed to test skills of analysis and expression, and on secondary school achievement. A portfolio of creative work must be presented during the interview. For planning, admission is based on the results of an interview, a test of writing ability, and on secondary school achievement. Both programs have a first-year program limit of 70 students.

• Bachelor of Science

Four-year honours
Available in: psychology, science (non-specialized).

Special Programs

• Bachelor of Arts

Honours co-operative programs
Co-op programs are available for honours students in the Faculty of Arts in accounting (chartered accountancy studies, economics option and management accountancy studies, economics option), anthropology, applied economics, chartered accountancy studies (economics option), English, management accountancy studies (economics option), political science, political science with administrative studies, psychology, sociology, and in applied studies. Applied studies co-op combines a package of basic and general education courses with a major in any one of the following disciplines: anthropology, classical studies, drama and theatre arts, economics, English, fine arts, French, German, history, Latin, philosophy, political science, psychology, religious studies, Slavic studies, sociology or Spanish.

Admission requirements
Students applying for admission to arts co-op and arts co-op accountancy studies must present a minimum of 70% in six Grade 13 credits. See also "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Honours co-operative programs
Five programs which begin the first year are offered under the co-operative system of study: co-op biology, co-op biology and chemistry, applied chemistry, applied earth sciences (geology and geophysics), and applied physics (non-specialized or geophysics option). These programs provide the student with sound academic training in conjunction with practical experience such as that gained in industry and governmental agencies.

Admission requirements
See "General Admission requirements, Bachelor of Science".

• Bachelor of Independent Studies
The integrated studies program provides its students with the opportunity to create, structure and pursue their own studies using the resources of the university and the community. The program may include any combination of independent research, course work, seminars, tutorials, special projects and field work.

The BIS degree is awarded on the basis of the recommendation of supervisors (including two university faculty) appointed by the academic board for integrated studies who evaluate the student's program during a concluding two-term candidacy period.

Applicants (with or without a formal background) are expected to show strong aptitude for self-direction and the ability to flourish in an unstructured academic setting.

• Bachelor of Science (Dance),
Bachelor of Science (Health Studies),
Bachelor of Science (Kinesiology),
Bachelor of Arts (Dance),
Bachelor of Arts (Recreation)
The Faculty of Human Kinetics and Leisure Studies offers five different honours programs. The health studies, kinesiology and recreation programs may be studied under either the regular or the co-operative system. The dance program is available only under the regular system.

The regular honours program is four years in length and the honours co-operative program is four and two-thirds years in length. A three-year general program in dance is also available.

The dance program offers students the unique opportunity of studying dance from the perspective of the humanities, the social sciences and the biological sciences, as well as that of the performing arts. This type of program allows the student a wider range of career choices.

The health studies honours program prepares students for careers in health promotion and education, disease prevention, and modification of personal lifestyles to improve health. Students receive training in the biological sciences, the health sciences, the behavioural sciences related to health, and in research and program development methods. Graduates of the program may pursue careers in health promotion, environmental health, health planning, the biomedical sciences, or continue into graduate and professional programs in many health-related disciplines.

The kinesiology program examines the "how's" and "why's" of human physical activity through a unique blend of theoretical, laboratory and practical courses and experiences. For those students who maintain at least a "B" average, the program provides the necessary requirements for entrance into a faculty of education and studies toward the Ontario Teacher's Certificate. Kinesiology prepares students for work not only in education but also in industry and rehabilitation. The program also offers students opportunities to specialize in such areas as biomechanics, physiology, exercise management, motor learning, sports medicine and the social sciences.

The recreation program prepares the student for positions in recreation services through emphasis on the principles of administration, as well as an understanding of man's use of leisure. The recreation program features four elective areas of concentration: leisure studies, outdoor recreation, recreation administration, resource management, and therapeutic recreation services. Graduates of the recreation program are eligible to receive the Ontario Interim Municipal Recreation Director's Type A Certificate.

*For the purposes of the University of Waterloo, this course falls under the humanities heading.

†Students may also pursue a geography program through the Faculty of Environmental Studies. Students should consult with their departmental advisor about the program requirements that will qualify them for consideration for admission to the corresponding course at a Faculty of Education.

‡Honours Accounting, a professional three-year program followinn preparatory work that normally takes 3 or 4 terms of university study, has received special status from the Institute of Chartered Accountants of Ontario and from the Society of Management Accountants of Ontario. Graduates of this program will proceed directly to write the Uniform Final Examinations (CA) or the Final Accreditation Examinations (RIA).
Graduates of Honours Chartered Accountancy Studies or of Honours Management Accountancy Studies will have completed the minimum course requirements of the ICAO or SMAO respectively. The other principal requirements for the CA designation include two or three years' work experience in public accounting and successful completion of the ICAO summer school and the Uniform Final Examinations. Honours Management Accountancy Studies is structured to give the maximum number of exemptions. Successful completion of RIA depends upon completion of one additional course taught by the Society and successful completion of three challenge examinations.

Co-operative work terms are accepted by both the institute and the society as part of their respective internship requirements. Thus, co-op graduates are able to complete all institute or society requirements in as little as one year after graduation. Graduates of the regular program are able to complete all such requirements in as little as two years after graduation.

Grade 13 Requirements for Admission to the Bachelor of Science (Honours Kinesiology, Honours Health Studies, Honours Dance) and the Bachelor of Arts (General Dance, Honours Dance, Honours Recreation) Programs
Applicants to the kinesiology program are required to select a Grade 13 program with at least two of the following courses: biology, chemistry, physics and one Grade 13 mathematics course (calculus preferred). Applicants are encouraged to include four Grade 13 courses from biology, chemistry, physics, functions and relations, algebra and calculus. Applicants to the recreation programs should present one Grade 13 mathematics course from calculus, algebra or functions and relations. Persons admitted without Grade 13 mathematics will be required to complete such a mathematics or a university equivalent. Some applicants to recreation may be required to come to the university for an interview as part of the admission process. Applicants to the health studies program must include Grade 13 biology and chemistry in their Grade 13 program. In addition to this requirement, applicants with an overall average of 70% or better will be given first consideration. Students applying to the joint honours health studies/kinesiology program must fulfil the kinesiology admission requirements. For health studies, kinesiology and recreation, applicants with overall Grade 13 averages above 65% are given first consideration.

Applicants to the Honours Bachelor of Science program in dance are encouraged to include four Grade 13 courses from biology, physics, functions and relations, algebra, and calculus. Dance program applicants, including those applying to the BA programs, are required to audition for placement in studio technique courses.

University of St. Jerome's College

St. Jerome's College is federated with the University of Waterloo. Undergraduate students may register in regular and co-operative programs in arts and mathematics through the college. St. Jerome's offers a unique perspective in its wide range of courses and its students enjoy all the privileges of the university while participating in a smaller college atmosphere. Twenty-seven full-time and six part-time professors teach a complete range of arts courses. St. Jerome's is known for its commitment to academic excellence as well as for its residential spirit. Students earn University of Waterloo degrees.

Renison College

Renison College offers both men and women a sample of life in a small residential community combined with the resources of the larger university.

Courses leading to a Bachelor of Arts degree are available in two areas:
a) social development studies, featuring interdisciplinary work in psychology, social work, interdisciplinary social science and sociology. Community involvement is an integral aspect of this program;
b) general arts, including courses in arts, English, fine arts, geography, psychology, religious studies, and sociology.
The college also offers a diploma and various certificates in social work.

Conrad Grebel College

Conrad Grebel is a small residential and teaching college affiliated with the university and sponsored by the Mennonite church. Courses open to all university students are offered in arts, history, music, religious studies, sociology, and peace and conflict studies. The residence emphasizes a responsible and caring community and encourages Christian values.

St. Paul's College

St. Paul's United College is a small teaching and residential community. It offers a number of university credit courses in religious studies and Canadian studies. Residence life provides a valuable contribution to student life at the university. Through a program of athletics, community dinners, social activities, student counselling, and student government, residents in the college and associate members participate in a vital and enriching community experience.

Residence 1983-84
Student Village I and II $2 946, $2 740
Conrad Grebel College $2 700 (double)
Renison College $2 940, $2 730
St. Jerome's College $2 290 (double), $2 650 (semi-private) (1982-83)
Notre Dame College $2 364, $2 218 (1982-83) (no meals Saturdays)
St. Paul's College (semi-private) approximately $2 600
The above fees are for an eight-month academic session. Co-operative students are assessed per term at 50% of the above rates. All rates include meals.

Tuition Fees 1983-84
(including incidental fees)
Architecture – year one (eight-month session) $1 313.74; upper-year co-op (per four-month term) $769.33
Arts (per eight-month session) $1 214.74
Engineering (per co-operative four-month term) $772.33
Environmental studies (per eight-month session) $1 214.24
(per co-operative four-month term) $719.58
Human kinetics and leisure studies (per eight-month session) $1 215.74
(per co-operative four-month term) $720.33
Integrated studies (per eight-month session) $1 209.74
Mathematics (per eight-month session) $1 214.74
(per co-operative four-month term) $719.83
Optometry (per eight-month session) $1 307.74
Science (per eight-month session) $1 217.74
(per co-operative four-month term) $721.33

Further Information
Inquiries concerning admission requirements and student awards should be directed to
Ms. Norma S. Walker
Director of Admissions and Student Awards
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 2265

Secondary School Liaison Officer
Mr. Stephen J. Little
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 2582

The University of Western Ontario

London

President: G. E. Connell

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	17 249	1 794
Part-time	6 455	756

Faculties, Schools Institutes
Faculty of Arts
Faculty of Dentistry
Faculty of Education
Faculty of Engineering Science
Faculty of Graduate Studies
Faculty of Law
Faculty of Medicine
Faculty of Music
Faculty of Nursing
Faculty of Part-time and Continuing Education
Faculty of Physical Education
Faculty of Science
Faculty of Social Science
School of Business Administration
School of Journalism
School of Library and Information Science

Affiliated Colleges
Brescia (Roman Catholic), Huron (Anglican), and King's (Roman Catholic).

General Admission Requirements
1)Enrolment in first year is limited and admission to Western is competitive.
2) Western will accept first-year students up to our maximum capacity. Applicants seeking admission from Grade 13 will require a miniumum of six Grade 13 credits approved by the Ministry of Education in accordance with Circular H.S.1 and the University.
3) Early provisional offers of admission are based on the applicant's Grade 13 intermim average. Those in the lower 60's may have difficulty gaining admission.
4) The comments and recommendation of the principal (or designate) of the school in which the student completed secondary education will be reviewed.
5) Applicants for whom English is not a first language are required to write either of the following tests: "Test of English as a Foreign Language" (TOEFL) or "English Proficiency Test of the English Language Institute" (ELI).
6) An offer of admission will be withdrawn if the final average is less than 60%.

Subject Area Requirements
In addition to the general requirements, the following specific Grade 13 courses are required, or are recommended, for entry to particular first-year programs. (For programs not listed below, check under the specific program listing for admission requirements).

Arts
English and a second language are strongly recommended. Specific programs may have their own admission requirements.

Physical education
Three-year program – Grade 13 biology is recommended. Four-year program – if Grade 13 bi-

ology is not taken, then biology 021 must be included in first year. Grade 12 mathematics and Grade 11 physics are strongly recommended for both programs.

Science
Two credits in Grade 13 mathematics, including one in calculus and one in algebra or functions and relations are required.

Social science
English is strongly recommended and a second language would be valuable. Students interested in economics, geography, psychology and sociology are strongly urged to complete at least two credits in mathematics, including calculus, and to explore computer science where this subject is available.

Visual arts
Languages other than English are strongly recommended for those concentrating in art history.

Limited Enrolment
The following programs have limited enrolment: administrative office management, administrative and commercial studies, business administration, communicative disorders, computer science, dentistry, engineering science, home economics, law, medicine, music, nursing, occupational therapy, physical therapy, social work, and visual arts.

Agricultural and Biological Sciences

• Bachelor of Science

Three-year general
Available in: biology, biology and chemistry (combined).

• Bachelor of Science

Four-year honours
Available in: biochemistry, biology, biophysics, ecology and evolution, genetics, microbiology and immunology (combined), plant sciences, zoology.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Science)".

Education/Physical Education/Recreation

• Bachelor of Arts

Three-year general/four-year honours
Available in: physical education.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Physical education)".

• Bachelor of Education
One year program.

Admission requirements
Applicant must have a university degree.

Engineering and Applied Sciences

• Bachelor of Engineering Science
Four years beyond senior matriculation. Specialization is possible in the last five terms in chemical and biochemical, civil, electrical, materials, mechanical engineering.

Admission requirements
Six Grade 13 credits including calculus, relations and functions and two credits from algebra, chemistry, physics. It is strongly recommended that all five of these credits be included. Also, see "General Admission Requirements".

Fine and Applied Arts

• Bachelor of Arts

Three-year general
Available in: film (arts), music, visual arts.

• Bachelor of Arts

Four-year honours
Available in: art history and criticism (visual arts), English and drama (arts), music, visual arts.

Admission requirements
Arts – see "Subject Area Requirements (Arts)".
Dance – see "Subject Area Requirements (Physical education)".
Music – a satisfactory audition and interview are required.
Visual arts – see "Subject Area Requirements (Visual arts)".
Also, see "General Admission Requirements" for general requirements for all programs.

• Bachelor of Fine Arts

Four-year honours
Available in: studio arts.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Visual arts)".

• Bachelor of Music

Four-year honours
Available in: music education, music history, performance (any standard orchestral or band instrument, piano, organ, harpsichord, harp, guitar or voice), theory and composition (combined).

• Bachelor of Musical Arts

Three-year general
Available in: music education, performance.
Note: The Faculty of Music also offers an Artist Diploma in Performance. With the exception of the Artist Diploma program, the first year of each program is common, with specialization beginning in second year.

Admission requirements
a) six Grade 13 credits, one of which may be music or the equivalent conservatory certificate. In very special circumstances credits in both Grade 13 music and equivalent conservatory standing will be considered.
b) satisfactory audition on the principal instrument (any standard orchestral or band instrument, piano, organ, harpsichord, harp, guitar or voice) of at least conservatory Grade 8 standard (keyboard performers and those intending to major in performance should be above this level), scales and other technical exercise, sight reading and sight singing. For the Artist Diploma program the audition should demonstrate at least conservatory Grade 10 standard, as well as show evidence of exceptional performance ability before a performance jury.
c) interview, for which no special preparation is necessary.
d) Piano requirement (for those whose principal instrument is not keyboard) of an approximate Grade 6 conservatory level. Applicants otherwise successful who cannot meet this requirement must satisfy it prior to entry into second year.
The Faculty of Music also offers a one-year Artist Diploma in Performance for those who possess a degree in Performance and who complete a satisfactory audition on the principal instrument (any standard orchestral or band instrument, piano, organ, harpsichord, harp, guitar or voice) of at least conservatory Associateship standard, as well as show evidence of exceptional performance ability before a performance jury.
Note: Students must arrange an audition by contacting the Faculty of Music early in 1984.

Health Professions and Medical Sciences

• Bachelor of Science

Four-year honours
Available in: history of medicine and science, pharmacology and toxicology (combined), physiology, physiology and pharmacology (combined), physiology and psychology (combined).

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Science)".

• Bachelor of Science in Nursing
Three-year program (for registered nurses)

• Bachelor of Science in Nursing

Four-year program
This program qualifies graduates to apply for registration with the College of Nurses of Ontario.

Admission requirements
Grade 13 chemistry, Grade 13 biology and at least Grade 12 mathematics are required.

• Doctor of Dental Surgery
Students in the following categories are eligible to apply for admission to the first year of the four-year program in the Faculty of Dentistry: those who are in or who have successfully completed a second-year program at Western, or an equivalent second year at another university, provided that the program has included a minimum of four honours courses or equivalent within the first 10 courses completed. All applicants must have successfully completed one full laboratory course in each of biology, chemistry, physics and organic chemistry.
Priority consideration shall be given, all other things being equal, firstly to Canadian citizens and permanent residents who have resided in Ontario for one year before the application deadline for the year for which admission is sought; secondly to all other Canadian citizens and permanent residents. One position is available for a student supported by the Canadian International Development Agency or a similar agency.

• Doctor of Medicine

Requirements for admission to the Doctor of Medicine program
Admission to the first year of the four-year program in the Faculty of Medicine is based on successful completion of a second-year program at an Ontario university, provided that the program has included a minimum of four honours courses or equivalent within the first 10 courses attempted. All applicants must have successfully completed one full laboratory course in each of biology, chemistry, physics and organic chemistry and are advised that it is to their advantage to have successfully completed one course in behavioural science. (The Admissions Committee will consider applications from candidates who were Ontario Scholars and who achieve exceptional standing in first-year programs in the Faculty of Science at The University of Western Ontario.)

Priority is given, all other things being equal, to Canadian citizens or permanent residents who are residents of southwestern Ontario and those areas of Ontario not serviced by an Ontario medical school. A minimum of two positions will be available for suitable applicants whose permanent place of residence in Ontario is north of the French River. Applications will not be accepted from applicants who are not Canadian citizens or permanent residents. (Two positions may be available for students supported by the Canadian International Development Agency.)

• Program in Communicative Disorders

Four years
Enrolment is limited. Degree granted: BSc (CD).

Admission requirements
A preparatory year in the Faculty of Science or the Faculty of Social Science is required. Also, see "General Admission Requirements".

• Program in Occupational Therapy

Four years
Enrolment is limited. Degree granted: BSc (OT).

Admission requirements
Grade 13 biology is mandatory. Also, see "General Admission Requirements".

• Program in Physical Therapy

Four years
Enrolment is limited. Degree granted: BSc (PT).

Admission requirements
Grade 13 including two credits in mathematics, one of which must be calculus followed by a preparatory year in the Faculty of Science or the Faculty of Social Science are required. Also, see "General Admission Requirements".

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: Classical studies, English, French, German, Greek, Italian, Latin, philosophy, Russian, Spanish.

• Bachelor of Arts

Four-year honours
Available in: classics, English and drama (combined), English language and literature, French language and literature, German language and literature, Greek and Latin (combined), Latin, philosophy, Russian studies, Spanish language and literature. All the languages and philosophy may be combined with anthropology (linguistics specialization).

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Arts)".

• Diplome de Français Pratique

Admission requirements
The applicant must have Grade 13 French or the practical equivalent. An interview may be required.

Mathematical and Physical Sciences

• Bachelor of Arts (given through the Faculty of Science)

Three-year general
Available in: computer science, geology, mathematics, statistics.

• Bachelor of Arts (given through the Faculty of Science)

Four-year honours
Available in: actuarial science, actuarial science and mathematics (combined), mathematics, mathematics and statistics (combined), statistics.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Science)".

• Bachelor of Science

Three-year general
Available in: applied mathematics, chemistry, chemistry and biology (combined), chemistry and geology (combined), computer science, geology, geophysics, mathematics, mathematics and computer science (combined), mathematics and statistics (combined), physics, statistics.

• Bachelor of Science

Four-year honours
Available in: actuarial science, actuarial science and mathematics (combined), applied mathematics, astronomy, chemistry, computer science, computer science and physiology (combined), geology, geophysics, geophysics and computer science (combined), mathematics, mathematics and computer science (combined), mathematics and statistics (combined), physics, statistics.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Science)".

Social Sciences and Related Courses

• Bachelor of Arts (given through the Faculty of Social Science)

Three-year general
Available in: administrative and commercial studies (ACS), administrative and commercial studies/Diplôme Français Pratique (combined), administrative office management (AOM), anthropology, economics, geography, history, political science, psychology, sociology.

Admission requirements
Along with specific requirements listed below, see "General Admission Requirements".
ACS – Grade 13 mathematics and English are strongly recommended.
AOM – A basic facility in typewriting and a straight copy speed of at least 35 words per minute are required. English is strongly recommended.
All other programs – see "Subject Area Requirements (Social science)".

• Bachelor of Arts (given through the Faculty of Social Science)

Four-year honours
Available in: anthropology, anthropology (linguistics), economics, geography, geography (resources conservation), geography (urban development), history, political science, psychology, psychology and physiology (combined), sociology and combinations of the above.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Social science)".

• Bachelor of Arts (Business Administration)
Students seeking admission to the program in honours business administration may apply after the successful completion of the first two years in any faculty. However, students must have included three required courses: full introductory college mathematics or computer science; introductory economics; and business 257, a second-year accounting course. One Ontario Grade 13 mathematics (or university equivalent) is also required. This program is given through the school of Business Administration.

• Bachelor of Laws
Three years following the successful completion of at least two full years beyond Ontario Grade 13 in a recognized university. Degree preferred.

• Bachelor of Science (Home Economics) (given through the Faculty of Science and Brescia College)

Three-year general/four-year honours
Available in: clothing, textiles, design; comprehensive (teaching and related fields); food and nutrition.

Admission requirements
A full year of successful study at the Grade 13 level. Credits in Grade 13 biology, Grade 13 chemistry, and Grade 12 mathematics is required. For the clothing, textiles and design programs only, physics may be substituted for biology. Grade 13 English is recommended. Also see "General Admission Requirements".

• Bachelor of Social Work (given through King's College)

Four-year honours
Students must include "Introduction to Social Work" (Social Work 020) in their first year of studies at university and must register at King's College for the final three years of the program. Enrolment is limited.

Admission requirements
See "General Admission Requirements" and "Subject Area Requirements (Arts, Science or Social Science)".

Brescia College

Brescia College is a residential women's college under Roman Catholic auspices affiliated with The University of Western Ontario. Certain courses are taken at Western or at the other affiliated colleges. Some classes in the college are coeducational.

For further information please contact
Mrs. M. Hawkins
Registrar
Brescia College
1285 Western Rd.
London, Ontario N6G 1H2
Telephone (519) 432-8353

Huron College

Admission requirements may differ slightly from Western's. Consult College Registrar for details.

For further information please contact
Miss J. Catherine Ridley
Registrar
Huron College
1349 Western Rd.
London, Ontario N6G 1H3
Telephone (519) 438-7224

King's College

For further information please contact
Mr. Desmond Dutrizac
Registrar
King's College
266 Epworth Ave.
London, Ontario N6A 2M3
Telephone (519) 433-3491

Residence
The university provides accommodation for approximately 33% of the non-London student enrolment through the residences for single and married students. Approximately 65% of the beds in the "traditional-style" residences are reserved for freshmen. There is a 400-unit apartment complex for single students, and a 400-unit apartment and townhouse family housing complex. First-year and senior-year applicants who are not attending Western will automatically be sent an application for the "traditional-style" residences if they indicate a requirement for residence on their academic application form. Information may be obtained by writing directly to
The Manager
Residence Admissions Office
Room 126, Somerville House
The University of Western Ontario
London, Ontario N6A 5B8

Note: The Off-Campus Housing Service is located in Room 126, Somerville House.

Westminster College is a United Church of Canada sponsored residential college for 232 students. For information please write to
Mr. Neil A. Campbell
Dean of Residence
Westminster College
1476 Richmond St.
London, Ontario N6G 2M2

Tuition Fees 1983-84
(including incidental fees)
Faculties of Arts, Science, Social Science, Business Administration, Education, Physical Education, Nursing, Law $1 227.65
Programs in communicative disorders, physical therapy and occupational therapy $1 227.65
Faculty of Music (includes Instrument Fee) $1 332.65
Faculty of Engineering $1 322.65
Faculty of Dentistry (includes dental kit fee) First year $3 937.65
Faculty of Medicine $1 577.65 (includes supplementary fee for laboratory equipment)

The above fees include a non-academic charge for the University Community Centre, Recreation and Athletic Building, the University Students' Council, athletics, and health services.

Tuition fees for students on student visas
First-year students excluding those programs listed below (not registered in an Ontario university program before September 1, 1982 or registered but completed fewer than 2½ courses) $3 905.65
First-year Engineering, Dentistry, Education, Home Economics, Medicine (MD), Nursing $6 285.65
Continuing students (registered in an Ontario university program and completed 2½ courses before September 1, 1982) $2 424.65

Further Information
For additional information on admissions, programs, the pre-admission academic counselling program, or on visiting Western, please contact
Director, Liaison Services
Stevenson-Lawson Building, Room 151
The University of Western Ontario
London, Ontario N6A 5B8
Telephone (519) 679-2326/27

Senior Associate Registrar, Admissions
Stevenson-Lawson Building, Room 165
The University of Western Ontario
London, Ontario N6A 5B8
Telephone (519) 679-2333

For information and application forms for student awards and loans, write to
Director of Student Awards
Somerville House, Room 107
The University of Western Ontario
London, Ontario N6A 3K7
Telephone (519) 679-2400

Wilfrid Laurier University

Waterloo

President: Dr. John Weir

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	3 964	285
Part-time	2 627	290

Faculties, Schools and Institutes
Faculty of Arts and Science
Faculty of Graduate Studies
Faculty of Music
Faculty of Social Work
School of Business and Economics
Waterloo Lutheran Seminary

General Admission Requirements
Admission from Grade 13 to the university will be based on the following criteria:
a) Grade 13 subjects sufficient to qualify the applicant for an Ontario Secondary School Honour Graduation Diploma plus the specific program requirements as outlined after each program listing,
b) an academic standing based on the applicant's record of the last two years,
c) a recommendation from the secondary school principal.

Bachelor of Arts
A three-year general program (15 courses) and a four-year honours program (20-24 courses) are available. For the general program Grade 13 English is recommended. For the honours program the applicant must have the minimum subject standing(s) specified by the department in which he or she wishes to pursue honours studies. A minimum Grade 13 average of 60% is required and Grade 13 English is recommended. Students applying to the administration option require a minimum average of 65% to qualify.

Bachelor of Science
A three-year general program (15 courses) and a four-year honours program (20 courses) are available. Requirements for admission to the general science programs are two mathematics (calculus and either algebra or functions and relations) and any two of biology, chemistry or physics. Students who do not satisfy all of the above requirements but who do have a good overall academic standing may be eligible for admission. Admission will be at the discretion of the Admissions Committee. Requirements for admission to the honours science programs are two mathematics (calculus and either algebra or functions and relations) and two of biology, physics or chemistry. Note: The applicants must possess the minimum subject standing(s) specified by the department in which he wishes to pursue honours studies. Double honours programs in chemistry and biology, and mathematics and biology require two mathematics one of which must include calculus, chemistry and one of biology or physics for both programs. Requirements for admission to the honours computing and computer electronics are two mathematics (calculus and either algebra or functions and relations), physics and one of chemistry or biology (preferably chemistry).

Grade 12 Scholarship Program
Since 1966 Wilfrid Laurier University has offered a number of summer session scholarships to students who are completing Grade 12. The students selected come to the campus about July 1 and take any two first-year courses over a period of six weeks. The student holds degree credit for courses passed in the summer session. Successful candidates must:
a) obtain a minimum average of 75% at the end of Grade 11 and on interim Grade 12 marks,
b) be recommended by their principal,
c) have spent no more than four years in a secondary school,
d) agree to attend summer session, taking any two first-year courses,
e) be enrolled in a full Grade 12 program (university stream) which will qualify them for enrolment in Grade 13.

Successful applicants will be offered:
a) summer session scholarships, covering tuition, to take any two first-year courses during the six-week summer session (begins about July 1);
b) admission to the first year of the General or Honours BA or BSc or Honours B. Music program in September, if a grade point average of 7.00 (B-) is obtained in the summer courses; students attending the summer session who wish to apply to honours business in September must receive approval from the Admissions Committee of the School of Business and Economics prior to the commencement of the Grade 12 summer session.
c) eligibility for a limited number of university scholarships ($500 per year) if a grade point average of 10.00 (A-) is obtained in the summer courses.

Students will advance to a general BA degree in three years or honours BA degree in four years beyond Grade 12. In certain cases students may be admitted to general science. Students may return to Grade 13 if they wish at the end of the summer session. Applications must be submitted by April 1 using the OUAC 101 form, available in secondary schools.

Agricultural and Biological Sciences

• Bachelor of Arts

Three-year general
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: biology.

• Bachelor of Science

Four-year honours
Available in: biology, biology and chemistry (combined), biology and mathematics (combined), biology with possible concentration in ecology, taxonomy, general botany, general zoology, pre-medicine or pre-dentistry.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Arts

Three-year general
Available in: physical education.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Fine and Applied Arts

• Bachelor of Arts

Three-year general
Available in: fine arts, music.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Music

Honours program
Four years (20 courses and participation in at least one choir or ensemble each year). Students may follow the Honours BMus degree without specialization or they may choose to specialize in performance, baroque music, church music or composition. Courses are offered in theory, history, music education, and performance (instruction in all instruments and voice is offered).

Admission requirements
For the BMus honours program a minimum Grade 13 average of 60% is required. Additional qualifications are required for prospective students in
a) BMus – Grade 2 theory, Royal Conservatory of Music or its equivalent, and Grade 6 piano, Royal Conservatory of Music, or its equivalent. An applicant who is unable to meet this admission requirement must attain the equivalent level of piano proficiency by the end of the second year in the program.
b) piano and organ – a minimum level of Grade 9 piano, Royal Conservatory of Music or its equivalent.
c) voice or instruments other than organ or piano – Grade 8 Royal Conservatory of Music may be taken as a guide to the minimum level.

All prospective students must have an audition-interview with the faculty, to be arranged by appointment by April 30.

The applicant will be required to take a musical aptitude test, a written theory test, and to perform two compositions in contrasting styles in his or her own performance medium. All documentary evidence of the applicant's musical background and examination results should have been sent to the Office of the Registrar before this interview. Late applicants will be considered if space permits.

Practicum program
The practicum program, the first of its kind in Canada, provides an opportunity for students to obtain a higher standard of performance, as well as practical experience, by involving themselves in such projects as performance, teaching, church music, administration and music publishing. Students undertaking the practicum study complete three terms a year. In this manner, students may take advantage of full-time jobs when they are normally available in the fall.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: classics (Greek and Latin) communications, English, French, German, philosophy, religion and culture, Spanish.

• Bachelor of Arts

Four-year honours
Available in: English, French, German, Greek, Latin, philosophy, religion and culture, Spanish.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general
Available in: chemistry, mathematics, physics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Three-year general
Available in: chemistry, mathematics, physics and physical geography (combined).

• Bachelor of Science

Four-year honours
Available in: computing and computer electronics, chemistry and biology (combined), mathematics and biology (combined).

The aim of the computing and computer electronics program is to help students develop extensive programming abilities and acquire an in-depth understanding of computer hardware, microprocessors, microelectronics and digital systems.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general
Available in: anthropology, archaeology, Canadian studies, economics, geography, history, political science, psychology, sociology, urban studies, values education and world literature.

• Bachelor of Arts

Four-year honours
Available in: anthropology, archaeology, economics (see below), geography, German area studies, history, political science, psychology, sociology.

• Bachelor of Arts – Honours Economics

Four-year honours (22 courses)
Students may also combine honours economics with the finance and accounting option, co-operative option, administration option, mathematics option, and in combination with another honours program.
Co-operative option
The undergraduate Honours Economics degree programs also offer a co-operative option. Co-operative students begin their alternating sequence of work and study terms at the end of second year. Normally, a student would accumulate twelve months of practical work experience and graduate four months after students in the regular sequence. Students apply for the co-operative option during the fall of their first year of studies.

Admission requirements
For the Honours Bachelor of Arts in Economics students are required to have one Grade 13 mathematics course selected from calculus or functions and relations. One Grade 13 English course and an additional Grade 13 mathematics course are recommended.

• Bachelor of Business Administration

Four-year honours (24 courses)
Students may also combine studies with options in biology, chemistry, economics, mathematics or physics.

Co-operative option
The undergraduate business administration degree program now offers a co-operative option. Co-operative students begin their alternating sequence of work and study terms at the end of the second year. Normally, a student would accumulate 12 months of practical work experience and graduate four months after students in the regular sequence. Students apply for the co-operative option during the fall of their first year of studies.

Admission requirements
The following requirements will be effective for September 1984 admissions: Honours BBA (Bachelor or Business Administration) – Students are required to have one Grade 13 mathematics course selected from calculus or functions and relations. One Grade 13 English course and an additional Grade 13 mathematics course are recommended. The minimum Grade 13 average is determined yearly by an Admissions Committee.

Special Programs

• Internship Options
Internship options are available in honours anthropology, biology, computing and computer electronics, English, history, geography, and political science. Students in the internship program gain practical work experience at the end of their second and third academic years. Enrolment is limited and application to the program must be made in first year.

• Administration Option
Students registering in honours arts or science programs may wish to select the administration option. This option provides fundamental training in administration for arts or science students; eight specified business related options must be successfully completed within the 22-course honours degree program.

• Continuing Education
In the fall of 1978, Telecollege began offering university credit courses through television to students in the Waterloo area. Designed to bring the university directly to the homes of people who are unable to make regular trips to the campus, Telecollege will feature weekly introductory and senior courses in the humanities and in business, monthly live phone-in programs, and frequent meetings between professors and students. Such students will write essays and exams and will be subject to all the other requirements of regular students. Eventually, it is expected that all courses required for a degree will be made available through Telecollege.

Residence
Double rooms $1 315
Single rooms $1 440
Meal plans
Three meals a day, five days a week $1 355
One meal a day, five days a week $699

Tuition Fees 1983-84
(including incidental fees)
Full-time $1 172
Business administration (2nd, 3rd and 4th year)
$1 197

Further Information
Inquiries about admission requirements should be directed to
Mr. B. George Granger
Assistant Registrar (Admissions)
Wilfrid Laurier University
75 University Ave. W.
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 351

Inquiries about secondary school liaison and general university information should be directed to
Mr. Arthur Stephen
Associate Registrar (Admissions-Liaison)
Wilfrid Laurier University
75 University Ave. W.
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 385

Mrs. Christine Fazackerley
Miss Valerie Clark
Admissions-Liaison Officers
Wilfrid Laurier University
75 University Ave. W.
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 383

Information about student awards and loans may be obtained from
Mr. H. K. Braden
Director
Student Awards
Wilfrid Laurier University
75 University Ave. W.
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 254

University of Windsor

Windsor

President: Mervyn Franklin

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	8 267	660
Part-time	3 896	349

Faculties, Schools and Institutes
Faculty of Arts
Faculty of Business Administration
Faculty of Education
Faculty of Engineering
Faculty of Graduate Studies
Faculty of Human Kinetics
Faculty of Law
Faculty of Science and Mathematics
Faculty of Social Science
School of Computer Science
School of Dramatic Art
School of Music
School of Nursing
School of Social Work
School of Visual Arts

General Admission Requirements
An Ontario Secondary School Honour Graduation Diploma (OSSHGD) is required. The subjects required vary according to the university program which the student wishes to enter.

Early admission will be granted to applicants for the fall of 1983 on the basis of:
a) the total secondary school performance,
b) Grade 13 term and interim marks,
c) principal's recommendation.

Bachelor of Arts
An OSSHGD with an overall average of 60% as indicated above is required. For programs involving languages, the Grade 13 level of the appropriate language is normally required. For general or honours mathematics, functions and relations and calculus are required, algebra is recommended. For honours philosophy and mathematics or honours economics and mathematics, functions and relations is required while calculus and algebra are strongly recommended. For honours psychology, calculus is strongly recommended.

Bachelor of Science
An OSSHGD with an overall average of 60% is required.
For majors in chemistry: relations and functions, two or more of biology, chemistry, physics, geology, or an additional mathematics; 60% in mathematics and science is required; calculus, chemistry, physics and either algebra or biology are strongly recommended.
For majors in geology: at least two of biology, chemistry, geology, relations and functions, calculus, algebra, physics; an average of 60% in mathematics and science is required.
For majors in mathematics: relations and functions, calculus; algebra is recommended; an average of 60% in mathematical subjects is required.
For majors in physics: functions and relations, physics, two of calculus, algebra or chemistry; an average of 60% in mathematics and science is required.

For majors in biology (including pre-medicine, pre-dentistry, pre-optometry): calculus and at least two of biology, chemistry, geology, physics, functions and relations or algebra; an average of 60% in mathematics and science is required; functions and relations is strongly recommended.

Preliminary Year (Grade 12 only)
Students who have completed 27 academic credits oriented toward university studies in not more than four years of secondary school may wish to apply for the preliminary year at the University of Windsor. A minimum average of 66% is required. Students who have attempted Grade 13 are not eligible for preliminary year.

Applicants for the science, nursing and engineering preliminary year programs must have completed mathematics (Grades 11 and 12); physics and chemistry. Applicants for the commerce program and those who intend to major in mathematics must have completed mathematics (Grades 11 and 12). A student who intends to major in a specific language should have that language to the Grade 12 level.

Biological Sciences

• Bachelor of Science

Three-year general/four-year honours
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Arts

Four-year honours
Available in: drama in education.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Education
Consecutive program, one year in length, to prepare the student for certification to teach in Ontario schools from kindergarten to Grade 13.

Admission requirement
An approved degree from an accredited university.

• Bachelor of Human Kinetics
Four years with specialization in kinesiology or applied kinesiology.

Admission requirements
An OSSHGD with an overall average of 60%; Grade 13 English, biology and chemistry are recommended.

Engineering

• Bachelor of Applied Science
Four years, including one common year followed by three years of specialization in one of: chemical, civil, electrical, engineering materials, geological, industrial or mechanical.

Admission requirements
An OSSHGD with a minimum average of 60%. Because of limitations on enrolment, preference will be given to students with the best academic qualifications. The level five program should include functions and relations, calculus, algebra, physics, chemistry and English.

Fine and Applied Arts

• Bachelor of Arts

Three-year general
Available in: art history, drama, music, speech, studio art.

• Bachelor of Arts

Four-year honours
Available in: art history, drama.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Fine Arts
Four years, with specialization in either acting, music theatre, scenic design, or visual arts.

Admission requirements
An OSSHGD with an overall average of 60%. For specialization in acting or music theatre, successful completion of an audition is also required; auditions are normally held on specific dates during the spring.

• Bachelor of Music
Four years, with specialization in either history and literature, school music, performance or an individualized program.

Admission requirements
An OSSHGD with an overall average of 60% and an audition by the School of Music consisting of performance and a written test on music theory.

• Bachelor of Musical Arts
Three years, with wide option in music course selection under the supervision of academic counsellors. Emphasis is on freedom of choice and on designing a program to suit the individual student's interest and background.

Admission requirements
An OSSHGD with an overall average of 60%.

Health Professions and Medical Sciences

• Bachelor of Science

Three-year general
Available in: pre-dentistry, pre-mediine, pre-optometry.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

• Bachelor of Science in Nursing
Four years from Grade 13; three years for candidates with professional nursing qualifications. A one-year diploma program in public health nursing is offered for professional nurses.

Admission requirements
An OSSHGD including biology (English and chemistry are recommended), with an overall average of 60%. Completion of an Ontario Secondary School Graduation Diploma is also required, including English, chemistry, math and physics. An interview with the School of Nursing may be required.

Humanities and Related Courses

• Bachelor of Arts

Three-year general
Available in: Asian studies, classical civilization, comparative literature, English, French, German, Greek, Italian, Latin, linguistics, philosophy, religious studies, Russian, Spanish, Ukrainian. Netherlandic, Scandinavian, Polish, Slavic, and Portuguese languages are taught in combination with the above.

• Bachelor of Arts

Four-year honours
Available in: Asian studies, classical civilization, comparative literature, English, French, German, linguistics, philosophy, religious studies, Spanish. Greek, Italian, Latin, Russian and linguistics may be studied with one of the above, or with another discipline to complete a combined honours degree.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Arts

Three-year general/four-year honours
Available in: mathematics.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Computer Science
Three-year general/four-year honours

Admission requirements
An OSSHGD with 60% overall average and 60% in relations and functions, and calculus; algebra is recommended.

• Bachelor of Science

Three-year general/four-year honours
Available in: chemistry, geology, mathematics, physics.

• Bachelor of Science

Four-year honours
Available in: geography in climatology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Three-year general
Available in: anthropology, communication studies, economics, geography, history, home economics, political science, psychology, sociology, urban studies.

• Bachelor of Arts

Four-year honours
Available in: anthropology, communication studies, economics, geography, geography in resource management, geography in urban studies, history, home economics, international relations, Latin-American studies, political science, political science in urban studies, psychology, sociology.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Commerce
Four years, with emphasis on business and economic affairs with specialization in accounting, administrative studies, finance, management science and marketing.

Admission requirements
An OSSHGD with an overall average of 60%; calculus or algebra is required.

• Bachelor of Laws
Three years following at least two years of university (a minimum of five years from Grade 13). Applications should be made to the Faculty of Law, University of Windsor.

• Bachelor of Public Administration
Four years from Grade 13, with required courses in political science, economics, law, and business administration.

Admission requirements
A full program at the Grade 13 level with an overall average of 60%.

• Bachelor of Social Work
Four years from Grade 13.

Admission requirements
A full program at the Grade 13 level with an overall average of 60%.

Special Programs

• Bachelor of Commerce for University Graduates
A program consisting of 20 courses to supplement a non-business university degree. The program leads to the designation Bachelor of Commerce.

Admission requirements
Applicants must have a Bachelor's degree from an accredited university with an overall average, including any failure, of 60%.

• Certificate Programs
The University of Windsor offers certificate programs in the following: business administration, criminology and criminal justice, labour studies, municipal administration, organizational and career development, organizational communications, public administration.

These 12-credit certificate programs are generally offered on a part-time basis. For further information, contact the Registrar's Office.

Residence
The University of Windsor and its affiliates own and/or operate a total of eight residences for men and women, plus a central food complex to service these residences. Residence fees vary with the plan selected.

Tuition Fees 1983-84
(including incidental fees)
Full-time students per semester *(Note: Fees for 1st year non-Canadian students are in brackets and are listed immediately after regular student fees):*
Preliminary year $602 ($1 200)
Arts, music, science (1st year only) $602 ($2 130)
Commerce $605.25 ($2 133.25)
Computer science $602 ($2 130)
Education $600.50 ($3 433.50)
Engineering $657.25 ($3 447.25)
Dramatic arts, human kinetics, social work, visual arts $607 ($2 135)
Law $608.25 ($2 136.25)
Nursing $612 ($3 449)
Social sciences $604.50 ($2 132.50)
First-year graduate studies $602.75 ($2 358.75)

Further Information
Inquiries about admission requirements should be directed to
Mrs. Linda Urquhart
Assistant Registrar (Admissions)
University of Windsor
Windsor, Ontario N9B 3P4

Inquiries about student awards and loans should be directed to
Mrs. Marie Renaud
Office of Student Awards
University of Windsor
Windsor, Ontario N9B 3P4

For information on other aspects of the university and on university information programs for secondary schools contact
Mr. Joe Saso
Director of Secondary School Liaison
University of Windsor
Windsor, Ontario N9B 3P4
Telephone (519) 253-2341 (out-of-town callers may call collect)

York University

Toronto

President: H. Ian Macdonald

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	13 625	1 405
Part-time	13 695	1 484

Faculties, Schools and Institutes
Atkinson College
Centre for Continuing Education
Centre for Research in Experimental Space Science
Centre for Research on Environmental Quality
Faculty of Administrative Studies
Faculty of Arts
Faculty of Education
Faculty of Environmental Studies
Faculty of Fine Arts
Faculty of Graduate Studies
Faculty of Science
Glendon College
Institute for Behavioural Research
Osgoode Hall Law School of York University
York University Transport Centre

General Admission Requirements
Applicants for admission to the university must have completed a full Grade 13 program certified by the school as appropriate in terms of content and achievement for a university degree program, with standing in all Grade 13 subjects.

In addition to the academic record, the university requires a report from the high school. Candidates are advised that the holding of the published admission requirements means only that they are eligible for selection. The university makes its offers of admission to candidates with highest academic qualifications.

Candidates from the United States must present Scholastic Aptitude Test scores, both verbal and mathematical, offered by the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540.

Bachelor of Arts
To be eligible for admission, Faculty of Arts applicants must achieve a minimum overall average of 60% in any six Grade 13 credits.

The Faculty of Arts at the York Campus offers programs of study leading to the Bachelor of Arts degree at the ordinary and honours levels, on a full- or part-time basis. Degrees may be taken in the traditional disciplines, in interdisciplinary (thematic) studies and in individualized studies.

The student is introduced to the Faculty of Arts through a balance between disciplinary and interdisciplinary courses. Within the first seven courses (a normal full-time program consists of five courses per year), the student examines three interdisciplinary areas: humanities, social science and natural science. As well, the student may take a college course (maximum 20 students per class) allowing for experience with the small seminar setting. Students may take up to three disciplinary courses in their first year and have the option of either declaring a major subject in the first or second year of study. Electives may be selected from courses offered by other faculties at York.

The Faculty of Arts offers ordinary (15 courses

– normally three years) and honours (20 courses – normally four years) programs of study. Options for these programs are listed under specific subject areas.

In addition, interdisciplinary studies programs are offered in general honours. These programs are also listed under specific subject areas.

In an ordinary program, students take four or five courses in their major and select their remaining courses in accordance with the requirements of the Faculty of Arts and their own interests.

In an honours program, students pursue their studies within one of the following five formats:
a) specialized honours – students specialize in one subject by taking at least nine courses in their major program;
b) honours (double major) – students elect to major in two subjects, taking seven courses in the first major and seven in the second;
c) honours – students take at least seven courses in one major subject;
d) honours (major/minor), students take at least seven courses in the major subject and five courses in the honours minor;
e) specialized honours: individualized studies – students take a course of study designed around a theme or problem that interests them. Planned by the student in consultation with a faculty advisor.

Bachelor of Science
Applicants for admission to the honours, ordinary and liberal science BSc programs in the Faculty of Science must present six Grade 13 credits, with an overall average of at least 60%. Those intending to pursue honours and ordinary science programs are advised to select chemistry, physics and two credits of mathematics at the Grade 13 level.

Both specialized honours programs (120 credits minimum) and ordinary programs (90 credits minimum) are offered. Options for these programs are listed under specific subject areas.

Combined honours programs (120 credits minimum), in which the student may choose to major in a combination of two or three subjects, are available.

An honours science program (120 credits minimum), without specialization, is also offered.

Agricultural and Biological Sciences

• Bachelor of Science

Honours
Available in: biology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Education/Physical Education/Recreation

• Bachelor of Arts or Bachelor of Science

Honours
Available in: physical education.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

• Bachelor of Education
York's Faculty of Education offers a concurrent program in which students pursue their academic and professional studies simultaneously. Students co-register in the Faculty of Education and in the Faculty of Arts, Science, Fine Arts, or Glendon College. In other words, students work toward a BA, BSc, or BFA degree while at the same time working toward a BEd degree. With co-registration, an extra year is added to the normal length of the academic degree. Consequently, an ordinary degree (BA/BEd, BSc/BEd, BFA/BEd) takes four years; an honours degree takes five years. Further teacher training is not necessary upon graduation.

During the first year of academic study at York (or equivalent), students may apply to co-register in one of the following programs of the Faculty of Education: primary-junior, junior-intermediate, intermediate-senior. Specialized programs are also available in the following areas: education of exceptional students (EDEXS), visual arts, French as a second language (FSL), English as a second language (ESL), Judaic studies option, physical and health education.

Successful completion of any one of the combined BA/BEd, BSc/BEd, or BFA/BEd programs leads to recommendation for certification in Ontario as an elementary or secondary school teacher.

Engineering and Applied Sciences

• Bachelor of Science

Honours
Available in: applied computational and mathematical science, earth and atmospheric science.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Fine and Applied Arts

• Bachelor of Fine Arts and Bachelor of Arts in the Faculty of Fine Arts
The Faculty of Fine Arts offers a four-year honours program with specialized honours and general honours programs. Specialization occurs in the following areas:
Department of Dance – performance, choreography, notation, criticism, teaching, dance therapy, history;
Department of Film – film production and film studies;
Department of Fine Arts Studies – general honours or creative writing;
Department of Music – composition and improvisation, early music (performance and literature), jazz studies, world music (performance and literature);
Department of Theatre – performance, production and design, drama studies;
Department of Visual Arts – studio art (painting, sculpture, printmaking, design, drawing, photography), art history.

Evaluation procedure
In addition to the regular requirements for admission to the university, the Faculty of Fine Arts requires an evaluation of an applicant's suitability for any of its departments. The requirements for each department are detailed in the York University Undergraduate Calendar. It is the applicant's responsibility to make an appointment for evaluation. Applicants from Ontario, but residing some distance from Toronto, should note that the Faculty of Fine Arts will make every effort to have evaluators see them close to their homes. Applicants will be advised of the location and dates of these evaluations.

Requirements for admission to the Faculty of Fine Arts
Students may select any six Grade 13 subjects deemed acceptable by their school for the purpose of entrance to the university, with a minimum overall average of 60%. Applicants will also be required to offer appropriate evidence of aptitude or achievement by satisfying the evaluation procedure for the department to which application is intended.

Applicants of any age who do not hold the full Grade 13 or equivalent requirements may request special consideration if they can show evidence of high achievement in one or more of the several arts, and if they can satisfy the Senate Committee on Admissions and the Faculty of Fine Arts that they have a reasonable chance of success in both the academic and the professional portions of the university program of their choice.

General Arts and Science

• Bachelor of Science in Liberal Science
The curriculum for the liberal science program (90 credits minimum) is designed to meet the growing need for a general education. It includes a strong base in science, particularly for those students who have an interest in science but who do not intend when they enrol as undergraduates to pursue careers in science. The program permits maximum flexibility in the selection of courses offered by the Faculty of Science and by other faculties of the university. Students may continue their studies in the program to graduation or, as their interests develop, elect to apply to transfer into either another BSc degree program or other programs leading to professional careers in fields such as economics, political science, and business administration.

Humanities and Related Courses

• Bachelor of Arts

Honours
Available in: creative writing, English, French, German, Greek, Italian, Latin, linguistics, philosophy, Russian, Spanish.

• Bachelor of Arts

Honours interdisciplinary programs
Available in: mass communications (media) studies, religious studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

Mathematical and Physical Sciences

• Bachelor of Arts

Honours
Available in: computer science, mathematics, mathematics for commerce.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Science

Honours
Available in: chemistry, computer science, mathematics, physics.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Social Sciences and Related Courses

• Bachelor of Arts

Honours
Available in: anthropology, business and economics, classical studies, economics, geogra-

phy, history, political science, psychology, public policy and administration, sociology.

• Bachelor of Arts

Honours interdisciplinary programs
Available in: African studies, Canadian studies, classical studies, East Asian studies, Latin American and Carribean studies, law and society, social and political thought, urban studies.

Admission requirements
See "General Admission Requirements, Bachelor of Arts".

• Bachelor of Business Administration in the Faculty of Administrative Studies
A four-year honours undergraduate program. Students enter the program after two years of undergraduate study and complete their third and fourth years of study in the Faculty of Administrative Studies. Transfer to the Faculty of Administration Studies may be from the Faculty of Arts, Science, Glendon or from another university.

Admission requirements
To enter the program, students must complete two years of university study beyond Grade 13, or the equivalent. Within these two years of study students must complete one full year university course in economics and one full year course in calculus and one full year course in computer science. A course in statistics is also recommended.

• Bachelor of Law at Osgoode Hall Law School

Admission requirements
Candidates for this program must have successfully completed either three years of an approved university degree course following Grade 12 or two years of an approved university degree course following Grade 13, or have been awarded a degree in an approved program from a recognized university, and have satisfied all other requirements that may be prescribed.

• Bachelor of Science

Honours
Available in: psychology.

Admission requirements
See "General Admission Requirements, Bachelor of Science".

Special Programs

• Early Childhood Education – Joint Program York/Seneca

Four years
Bachelor of Arts (York) and Diploma in Early Childhood Education (Seneca).

Admission requirements
Applicants must have ten full university courses including a course in introductory psychology. Also, they must complete an admissions questionnaire and attend an interview.

• Rehabilitation Services – Joint Program York/Seneca

Four years
Bachelor of Arts (York) and Diploma in Rehabilitation Services (Seneca).

Admission requirements
Applicants must have ten full university courses including a course in introductory psychology. Also, they must complete an admissions questionnaire and attend an interview.

• Part-Time Daytime Studies
Each of the faculties, other than the Faculty of Administrative Studies, offers the opportunity for students to pursue studies on a part-time daytime basis.

Applicants should request, from the Admissions Office, information regarding the regulations pertaining to part-time studies in each faculty.

• Winter-Summer Session
As an alternative to beginning university in September, the Faculty of Arts and the Faculty of Science offer a winter-summer session for first year students. Entering students may commence their studies in January/February and complete their first academic session the end of June.

Admission requirements
See "General Admission Requirements, Bachelor of Arts, Bachelor of Science".

• Atkinson College
Atkinson College, the part-time evening Faculty of Arts and Science at York University, offers courses leading to four undergraduate degrees: Bachelor of Arts degree (both ordinary and honours), the Bachelor of Science degree (ordinary), the Bachelor of Administrative Studies (both ordinary and honours), and the Bachelor of Social Work degree (honours). In addition to the customary arts program, there are programs in Canadian studies, fine arts (music, theatre, film, visual arts), humanities, liberal studies (classical studies, communications studies, East Asian studies, individualized liberal studies, science, technology and society, social and political thought), social science, urban studies and women's studies. People who do not have an Ontario Secondary School Honour Graduation Diploma but who are over 21 years of age may apply for admission to Atkinson College. The college operates on a course-credit rather than yearly system. In summer, courses are offered during the day as well as in the evening. Courses are the equivalent of regular daytime courses, although not necessarily identical to them and are given mainly by the full-time Atkinson faculty. Classes are held on both the York and Glendon Campuses of the university. For further information about Atkinson College:
Atkinson College
York University
4700 Keele St.
Downsview, Ontario
M3J 2R7
Telephone (416) 667-2471

Residence 1983-84
Approximate fees (including meals)
Double rooms $2 329
Single rooms $2 573
Only a limited number of single rooms are available to first year students.
Fees are subject to change without notice.

Tuition Fees 1983-84
(excluding incidental fees)
Full-time Canadian and landed immigrant students $1 230
Part-time studies $246 per full year course (Canadian and landed immigrant students)
Fees for full-time new visa foreign students are $4 192.50.
Tuition fees are subject to change without notice.

Further Information
Inquiries about admission requirements should be addressed to
Mr. J. A. S. McNeil
Director of Admissions
York University
4700 Keele St.
Downsview, Ontario M3J 2R3
Telephone (416) 667-2211

For information about financial aid, please contact
Director of Student Awards
York University
4700 Keele St.
Downsview, Ontario M3J 2R3

Admissions/Liaison
Cora Marie Mickler Dusk
Assistant Director of Admissions
Debbie Glass, Schools Liaison Counsellor
Brenda Green, On-campus Co-ordinator
Dyanne Gibson, Liaison Counsellor, Mature Students
York University
4700 Keele St.
Downsview, Ontario M3J 2R3
Telephone (416) 667-2334

Glendon College Toronto

Principal: Philippe Garigue

Students at Glendon choose to study towards a Bachelor of Arts degree; the BA Honours (20 courses) or the BA Ordinary (15 courses). In addition to the Bachelor of Arts degree available at Glendon, students interested in teaching may choose to co-register (complete two degrees simultaneously) in the Faculty of Education taking courses towards both the Bachelor of Arts (BA) and the Bachelor of Education (BEd) degrees on the Glendon campus.

Glendon also offers students the preparatory courses required by York University's business school (Faculty of Administrative Studies) and the law faculty (Osgoode Hall Law School).

The college's commitment to bilingualism enables students to register in either the Unilingual Stream, where all work is in English, or to register in the Bilingual Stream, where a variety of options is available to students who wish to learn, improve or perfect their knowledge of French. Students may come to Glendon never having taken French, with some previous training or be fully bilingual and find courses designed to develop their language skills.

Programs offered

• Bachelor of Arts (BA) – 3 or 4 years
The college's programs or areas of specialization offer students a full range of possibilities in a liberal arts education. Interdisciplinary programs such as Canadian, International or Multidisciplinary Studies allow students to design their own pattern of courses using a variety of disciplines or approaches. Programs of a more traditional nature such as economics, history, and political science may be added to the list of Glendon's academic offerings. Also included in Glendon's list of programs is translation. Students interested in pursuing a BA Honours degree in translation at Glendon must first complete a first year (5 full courses, or the equivalent) of general university studies. Only a limited number of stu-

dents are accepted to this program and an entrance examination takes place in April.

As part of York University, Glendon students may choose to do courses outside the Glendon faculty, in various other faculties on the York campus.

Admission requirements
Applicants may select any six Grade 13 subjects deemed acceptable by their school for the purpose of entrance to the university.

English-speaking applicants to the bilingual program should normally have at least 60% in Grade 12 French or standing in Grade 13 French or equivalent, but some places are available in French language courses for which little or no previous preparation in French is required.

For students entering the unilingual stream, the normal Grade 13 admission prerequisites apply.

Residences
Glendon College has two residences that accommodate about 430 students. Each residence is divided into houses of 35 to 45 students each. Some houses are for men or women exclusively, while others are co-ed. Glendon may accommodate a percentage of 1st year students in single rooms. Students wishing single room accommodation must submit their application form and deposit by the end of June, or early July.

Fees
(including meals)
Single room $2 573
Double room $2 329

Visits and further information
The Glendon Liaison Office will arrange individual, class, or group tours of the college upon request. An appointment with an academic counsellor can be made to discuss course, program, or career choices.

For application forms, or additional information please write or phone the Glendon Liaison Office at:
Glendon College
2275 Bayview Ave.
Toronto, Ontario
M4N 3M6
Telephone (416) 487-6208

Teacher Education

General information concerning courses offered and admission requirements follows in this section of *Horizons*. For further information and application forms for admission, applicants should write to the faculty, school or college of education of their choice.

• How to Qualify as a Teacher for Ontario Schools
Students wishing to prepare themselves for a teaching career may apply for admission to a faculty, school or college of education, if they have the necessary qualifications.

The colleges, faculties or schools of education at Brock University, Lakehead University, Nipissing College, the University of Ottawa, Queen's University, the University of Toronto, The University of Western Ontario, the University of Windsor and York University offer courses for students who wish to qualify as school teachers for English-language schools.

In addition, the Faculty of Education of the University of Ottawa, and the School of Education of Laurentian University provide teacher education programs for those who wish to teach in schools or classes having French as the language of instruction.

Courses and Admission Requirements
For admission in September 1984 to courses leading to certification as a school teacher, the requirements stated below for faculties, schools or colleges of education will be in effect.

Courses for Teaching in English-language Schools
Basic one-year course
An applicant for admission in September 1984 to one-year programs leading to teacher certification for English-language and French secondary schools in Ontario will be required to submit evidence of successful completion of an approved university degree in arts or science, or a degree deemed equivalent.

Admission to University Faculties, Colleges or Schools of Education
To be eligible for an Ontario Teacher's Certificate in Ontario, an English-speaking applicant wishing to pursue a course in teacher education offered by the faculty or college of education of a university must meet the admission requirements of that institution and must successfully complete an approved academic degree program in arts or science, in addition to a year of professional training. (For details of admission requirements for degree programs, see the sections in *Horizons* on specific universities.)

For admission requirements for elementary school teacher certification valid in French-language schools or classes, an applicant should write to the Admissions Officer at the School of Education, Laurentian University or the Faculty of Education, University of Ottawa.

An applicant who wishes to enrol at a university offering a program in professional education for prospective teachers should write to the Admissions Officer or to the Dean of the faculty or college of education of the university for information regarding admission requirements and courses.

Teachers of Technological Subjects
To become qualified to teach technological subjects, a candidate must show evidence of at least Grade 12 or equivalent standing and approved, practical, wage-earning experience in a skilled trade directly related to the specialized subject field.

Detailed information regarding minimum admission qualifications, available courses, professional experience required and course content is available from the following sources
Director
Technical and Industrial Arts Department
Faculty of Education
University of Toronto
371 Bloor St. W.
Toronto, Ontario M5S 2R7

Associate Registrar
Faculty of Education
The University of Western Ontario
1137 Western Rd.
London, Ontario N6G 1G7

Co-ordinator of Technical Education
Faculty of Education
Queen's University
Kingston, Ontario K7L 3N6

For information on the summer program contact
Director of Teacher Education
Faculty of Education
University of Ottawa
René-Lamoureux Hall
651 Cumberland St.
Ottawa, Ontario K1N 6N5

Teachers of Special Subjects
In addition to the basic academic and vocational certificates valid in secondary schools, additional qualifications are required for the teaching of certain special subjects demanding specialized knowledge, training or experience.

Information regarding qualifications for the teaching of special subjects, such as art, guidance, home economics, industrial arts, library, music, and physical and health education and special education is available from
Teacher Education Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2

Fees
Tuition and other fees vary depending on the institution. Consult the appropriate section in *Horizons* or contact the institution concerned.

Financial Aid
Assistance based on financial need and students' actual costs is available under the Ontario Student Assistance Program. See the introductory section on financial assistance for details. Further information on financial aid is available from the Financial Aid Administrator of the university to which the student is applying.

Living Accommodation
Student teachers attending a university away from home can obtain from the housing bureau of the university a list of convenient boarding houses. For residence accommodation at university, students who are interested in living on campus should apply early. (See introductory section on students' costs for details.)

Application for Admission

Concurrent Programs

For concurrent programs (education program taken along with the first degree) apply through the Ontario Universities' Application Centre.

Consecutive Programs

The Ontario universities offering teacher education in a consecutive program (program taken after completion of the first degree) have a common application form which offers a candidate three choices of university on the same form. A candidate, however, may submit only one application form. These forms may be obtained from any of the universities listed below. Application forms are also available from the Admissions Office at all of the other Ontario universities.

Office of the Registrar
Brock University
St. Catharines, Ontario L2S 3A1

Assistant Registrar, Admissions
Lakehead University
Thunder Bay, Ontario P7B 5E1

Admissions Officer
Laurentian University
Sudbury, Ontario P3E 2C6

Office of the Registrar
Nipissing University College
College Education Centre
Box 5002
North Bay, Ontario P1B 8L7

Office of the Registrar
Admissions Section
University of Ottawa
550 Cumberland St.
Ottawa, Ontario K1N 6N5

Service du registraire
Section de l'admission
Université d'Ottawa
550, rue Cumberland
Ottawa (Ontario) K1N 6N5

The Registrar
Faculty of Education
Queen's University
Kingston, Ontario K7L 3N6

The Registrar
Faculty of Education
University of Toronto
371 Bloor St. W.
Toronto, Ontario M5S 2R7

Student Services – Admissions
Faculty of Education
University of Western Ontario
1137 Western Rd.
London, Ontario N6G 1G7

Office of the Registrar
Faculty of Education
University of Windsor
600 Third Consession Rd.
Windsor, Ontario N9B 3P4

The Office of Student Programs
Faculty of Education
York University
4700 Keele St.
Downsview, Ontario M3J 1P3

Canadian Coast Guard College

Ministry of Transport

The Canadian Coast Guard College in Sydney, Nova Scotia, offers excellent training and career opportunities to young men and women who have a desire for a seafaring life and want to see more of, and learn more about, Canada.

The college's aim is to produce professionally competent Coast Guard officers who have an understanding of modern leadership and management.

As graduate officers, they may serve aboard powerful ice-breakers, in search and rescue craft, aboard cable-laying vessels, or in the lighthouse and buoy-tending vessels that constantly travel Canada's shipping lanes to ensure that the nation's marine commerce moves in safety. The fleet has more than 60 vessels of sea-going size and includes some of the most powerful and most modern ships of their type in the world.

Enrolment 1982-83
Full-time 112

• Training
The college training course commences in September and includes mathematics, the sciences, marine law, and other fields related to shipping, as well as courses directly concerned with the ship's deck or engine room operation. The training period is divided into several phases for both courses:
Navigation cadet
- 4 months at the college
- 6 months at sea
- 12 months at the college
- 6 months at sea
- 5 months at the college

Engineering cadet
- 4 months at the college
- 3 months more practical training at the college
- 3 months at sea
- 12 months at the college
- 6 months at sea
- 5 months at the college.

Strong emphasis is placed on acquiring a working knowledge of both official languages so that graduates will be able to serve aboard vessels anywhere in Canada upon completion of their training.

Applicants must be prepared to serve as officers in the Canadian Coast Guard at sea for a period of three consecutive years immediately after graduation from the college.

Admission Requirements
To be considered for admission to the Canadian Coast Guard College, students must:
a) successfully complete secondary school with algebra, geometry and trigonometry to the Grade 12 level, one year of physics in high school (preferably two), and at least one course at the secondary school level in your second official language;
b) undergo a pre-employment medical check related to career requirements.

Students with an Ontario Secondary School Graduation Diploma (OSSGD), or who will receive it in 1984, are eligible to apply. Proof of graduation must be provided before an appointment as an officer cadet can be made. The closing date for application is January 31, 1984.

Benefits
Cadets receive a monthly allowance ($180-$220) while attending college. Sea training allowances may increase the total allowance to $14 000 – $16 000 over the length of the program. Upon joining, cadets receive travelling expenses from home to college. Return travelling expenses are covered, after the first $25, from the college to home once yearly by the most economical means.

Cadets receive free uniform issue, books, and board and lodging. They are covered by Government Employees' Workmen's Compensation and are eligible to participate in the Public Service Superannuation Plan, group surgical-medical provision, and many other benefits.

Physical Education
The college has a physical education program under the direction of qualified instructors.

Further Information
Requests for the application package and information concerning the Canadian Coast Guard College should be directed to
The Registrar
Canadian Coast Guard College
Box 3000
Sydney, Nova Scotia B1P 6K7

Canadian Memorial Chiropractic College

Toronto

Chiropractic is a system of healing which holds that some diseases result from disorders and interference of normal nerve function and that this deficiency can be corrected by the manipulation and adjustment of body structures – especially the muscles and the spinal column.

Founded in 1945, the college is a non-profit, professionally owned institution of higher learning providing modern facilities including classrooms, laboratories, an auditorium, a dissecting room, a clinic, an x-ray department and instructional x-ray facilities. The course of study covers four years of approximately 4 428 hours including basic science, chiropractic education and practical clinic training. The program leads to graduation with a diploma.

Enrolment 1982-83
Full-time 565

Admission Requirements
A candidate for admission must have completed Ontario Grade 13 or have the equivalent standing as determined by the Ontario Ministry of Education. In addition, candidates must have completed two academic years at a university in Canada or equivalent (10 credits, 60 semester hours) and have standing in prerequisite courses in biology, chemistry (inorganic and organic), psychology and physics. Candidates from the province of Quebec must have a minimum of two years of study in the Colleges of General and Professional Education (CEGEP). Applicants in doubt as to their qualifications are advised to submit their references and academic records to the registrar for evaluation and consideration.

Financial Assistance
Several admission scholarships, bursaries and in-course awards are available. Further information may be obtained from the college calendar or the registrar.

Ontario students may also be eligible for assistance on the basis of assessed need under the terms of the Ontario Student Assistance Program. Students from other Canadian provinces should contact their provincial government for information on financial aid.

Living Accommodation
While the college does not maintain residence accommodation, a housing service is available through the office of Student Services. Approximately 40 positions each year can be obtained at the student residences of the nearby Glendon College. Applications must be made early to: Dean of Students, Glendon College, 2275 Bayview Ave., Toronto M4N 3M6.

Tuition Fees
1983-84: $4 000 (including incidental expenses of $170)
Tuition fees for students from Quebec are $6 000 and for students from outside Canada fees are $6 500 (both figures include incidental expenses of $170). First year students are required to pay application, interview and registration fees totalling $480 ($250 of which is applied to tuition fees).

Further Information
For further information, please contact
Registrar
Canadian Memorial Chiropractic College
1900 Bayview Ave.
Toronto, Ontario M4G 3E6
Telephone (416) 482-2340

Centralia College of Agricultural Technology

Huron Park

Principal: J.D. Jamieson

Centralia College, located 50 kilometres north of London, offers two-year diploma courses in agricultural business management, animal health technology, food service management and consumer and community studies, as well as 12-week certificate courses for dairy and swine herd workers.

Enrolment 1982-83
Total 340

Admission Requirements
All diploma course applicants require an Ontario Secondary School Graduation Diploma or equivalent. Special admission requirements are explained below. Candidates for certificate courses must be 17 years of age or older, have Grade 8 or equivalent and have been out of school for at least one full year. A personal interview is also required. Mature applicants will be assessed on an individual basis.

• Diploma Courses Offered
(September to April term)

• Agricultural Business Management
This course offers training to people intending to manage their own or an employer's farm. As well, excellent job opportunities, some leading to management careers, exist in the agricultural supplies and services industry and in government. Emphasis is placed on business management throughout the course of study. A full-year farm analysis project gives students extensive management analysis experience in real farm situations while they are enrolled at the college. Through selection of elective subjects in second year, students may direct their study into areas of particular interest. Preference will be given to applicants with commercial agricultural experience.

• Animal Health Technology
This course is designed to train animal health technologists who will assist veterinarians in private practice. The study of farm animals is an important part of the curriculum. Practical experience for students is provided, both at the college and in the field, in cooperation with practicing veterinarians in the surrounding area. The course is accredited by the Canadian Veterinary Medical Association. Applicants must have the Ontario Secondary School Graduation Diploma. Preference will be given to applicants who have credits in chemistry, another science, mathematics, English and two other subjects (advanced level). A letter of reference verifying suitable work experience with a practicing veterinarian, is required. Enrolment is limited and preference is given to residents of Ontario. Applications are due February 1. Candidates who meet the admission requirements will be invited to the college for an interview.

• Food Service Management
This course is approved by the Ontario Dietetic Association and graduates are eligible for immediate membership in the Canadian Food Service Supervisors Association. A combination of academic and practical subjects pertaining to food service management prepares students for challenging careers as supervisors or managers in the food service industry. Emphasis is placed on management principles and production techniques related to the hospitality and institutional environments. Educational institutions, the rapidly expanding hotel and restaurant industry, as well as hospitals and other health-care facilities require graduates who are knowledgeable about the organization and function of food service. Graduates are qualified to work as food service supervisors in hospitals and other health-care institutions. Enrolment is limited and preference will be given to applicants who have credits in Grade 12 chemistry, mathematics and English.

• Consumer and Community Studies
This is a general course in home economics, with emphasis on family and consumer studies. Graduates will be qualified to work as home economics technicians in public and private health-care and social service agencies, as paraprofessionals in educational institutions, as technicians in consumer information bureaus, government departments or in agencies overseas. Applicants who have credits in Grade 12 chemistry, mathematics and English will be given preference.

• Certificate Courses Offered
Twelve-week courses starting in January funded by Canada Employment and Immigration Commission (Canada Manpower).

Dairy herd workers and swine herd workers are trained for employment on dairy and swine farms by a combination of classroom instruction and practical training on selected progressive farms.

Tuition Fees
Tuition per year $350 (Canadian students); $700 (foreign students).

The total cost per year including tuition, residence, meals, books and miscellaneous expenses is between $1 800 and $2 000, depending on the diploma program.

Financial Assistance
Bursaries, scholarships and other financial awards are offered by various organizations and municipalities. Students are also eligible for assistance from the Ontario Student Assistance Program.

Further Information
For further information, please contact
Principal
Centralia College of Agricultural Technology
Huron Park, Ontario N0M 1Y0
Telephone (519) 228-6691

The Certified General Accountants Association of Ontario

Toronto

Executive Director: Gordon W. Fuller, FCGA

Certified General Accountants are members of Canada's second oldest accounting organization (incorporated in 1913) and are found in positions such as controller, treasurer, director of finance, auditor, tax specialist and various other financial positions.

Through the CGA Association a course of study is offered which will prepare you to become direct participants in management. You will study such subjects as economics, law, information and computer systems, income tax, accounting and auditing to name a few.

Graduate CGAs are self-reliant, determined people with the ability to concentrate on a problem and carry it through to solution. This ability is a direct result of the CGA program which allows you to learn while still earning a living in related employment.

Graduation qualifies you for the designation CGA and membership in the Association.

Student Enrolment 1982-83
Total 8 460

Admission Requirements
The national minimum entrance requirement is Grade 12 or equivalent. Approximately 70% of those entering the course do so after having graduated from university or college. These students receive advanced standing in the CGA program. Students enrolled with the CGA Association may select the type of business in which they wish to be employed and gain their practical experience. The choice is entirely theirs. All applicants must be residents of Canada.

• Program of Study
The program is primarily on a self-study basis and is supplemented by lectures in eighteen locations throughout the province. These are generally held in universities and colleges.

A unique feature of the CGA course is that it is the only accounting course that offers options. The versatility of the option program allows senior students to specialize in one of five areas in the fifth level.

Senior students may now specialize in financial management, management accounting, public administration, public accounting and taxation, or take a general option.

The course is national and all subjects are identical in each province. Students may, therefore, transfer from province to province without any disruption in their study program.

Salaries
A salary survey conducted in December 1982 showed CGA salaries both for students and graduates to be at a high professional level. This is indicative of the steady and increasing demand for accountants with a broad educational background who have more versatility than those specializing in a narrower field. The median salary reported by CGA members eight years after graduation according to our 1982 survey was $39 000. The median salary for students in their final level was $27 000.

Modular System
CGA has a modular system of study which enables students to vary their subject sequence to suit the demands of their employer and their own personal needs.

Services
Students and members participate in and benefit from active local chapter associations. CGAO also operates a career counselling service, a comprehensive library, and provides its members and students with their own professional magazine, optional professional development courses and seminars.

Further Information
For further information, please contact the Director of Student Services at one of the following offices
The Certified General Accountants
Association of Ontario
480 University Ave.
4th Floor
Toronto, Ontario M5G 1V2
Telephone (416) 593-1103 or
toll free 1-800-268-8022

The Certified General Accountants
Association of Ontario
107 Sparks St.
Suite 301
Ottawa, Ontario
K1P 5B5
Telephone (613) 232-5363 or (613) 232-5364

Hospital Programs

The following programs are offered at the hospitals indicated.

Health Records Administration*
Two years
Offered at: St. Michael's Hospital
30 Bond St.
Toronto, Ontario M5B 1W8

Medical Laboratory Technology*†
Two years
Offered at: McKellar General Hospital
Ridgeway St.
Thunder Bay, Ontario P7E 1G6

St. Joseph's Hotel Dieu Hospital
155 Ontario St.
St. Catharines, Ontario L2R 5K3

Radiography*†
Two years
Offered at: Kingston General Hospital
Stuart St.
Kingston, Ontario K7L 2V7

Ottawa Civic Hospital
1053 Carling Ave.
Ottawa, Ontario K1Y 4E9

Radiotherapy
Thirty-two months
Offered at: The Princess Margaret Hospital
500 Sherbourne St.
Toronto, Ontario M4X 1K9

*These programs are also offered at colleges of applied arts and technology. See the CAAT chart at the beginning of this directory.

†These programs are also offered at Toronto Institute of Medical Technology. Refer to the Toronto Institute of Medical Technology listing in this directory.

The Institute of Chartered Accountants of Ontario

Toronto

Executive Director: David A. Wilson, FCA

Chartered accounting is one of the most rapidly expanding professions. The diversified practical experience of the chartered accountant is increasingly in demand in public practice, as well as in business, industry, government and education. As a result, the Institute's membership has grown from 5 000 in 1962 to more than 17 000 in 1982.

The Institute, which was founded in 1879, educates and examines candidates for the profession and regulates the professional standards of its members and students. Only members of the Institute can call themselves chartered accountants and use the designation CA.

Chartered accountants are trained as professional public accountants. As members of The Institute of Chartered Accountants of Ontario – the qualifying body under Ontario's Public Accountancy Act – CA's are eligible for a public accountant's licence. In addition to public accounting, many CA's hold senior positions in a variety of other fields.

Student Body
In 1982 the Institute registered more than 1 200 new students and during the year 763 students received their designation. The total student enrolment was 5 400.

The profession has been attracting an increasing number of female students over the last several years, since accounting is a field which offers equally rewarding careers to men and women.

Admission Requirements
University graduation is the basic admission requirement to the program of study leading to the CA designation. Although most students enrol in the CA program after receiving a commerce or business administration degree, many CAs have found that a background in arts, science, engineering or other disciplines is invaluable in their professional lives.

Mature students who do not have a university degree and for whom the requirement of an undergraduate degree would impose an unusual hardship may request exemption from the university degree requirement. Arrangements can also be made for those people who are working toward a degree on a part-time basis.

In addition to a university degree, the education requirements include a prescribed series of regular degree courses totalling 45 semester hours (approximately 15 university semester courses) in accounting and related subject areas.

• Program of Study
Students arrange to study at the university of their choice either as part of their degree course requirements or through additional studies after graduation.

Students must also obtain employment in the office of a practising chartered accountant approved for the training of students and register with the Institute in order to start the three years of practical experience they must acquire. Exceptional students may qualify for a reduction from three to two years in the practical experience requirement. Details are available from the Institute.

The education program also requires students to successfully complete the Institute's School of Accountancy – a six month program of independent study followed by four weeks of full-time instruction. Held in May and June of each year, the program concentrates on auditing, taxation, and advanced and specialized accounting, and students must complete it before attempting the Canada-wide final examination.

• Co-operative Programs
Several Ontario universities, listed below, offer CA co-operative programs of alternating work and study terms which are approved by the Institute. Students may complete the 45 semester hour requirement in these programs and fulfil, in some cases, up to two years of the practical experience requirement as part of the degree program.

The University of Waterloo offers three Honours CA undergraduate degree programs.

Honours Accounting, a professional three-year program following preparatory work that usually takes three or four terms, has received special status from the Institute of Chartered Accountants of Ontario. Graduates of this program will proceed directly to write the Uniform Final Examinations.

The other two programs are Honours Chartered Accountancy Studies (Economics option) in the Faculty of Arts and Honours Mathematics (Chartered Accountancy option) in the Faculty of Mathematics.

Wilfrid Laurier University offers a CA co-operative undergraduate degree program in business administration. Brock University also has a CA co-operative undergraduate degree program leading to an honours Bachelor of Administration degree.

McMaster University offers a CA co-operative program in business administration. The program is similar in approach to other co-op programs except that it is at the graduate level.

Further information on these programs may be obtained from
Department of Economics,
The Accounting Group
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 2755

Faculty of Mathematics
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 3905

Office of Co-operative Education
Wilfrid Laurier University
75 University Ave. W.
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970

School of Administrative Studies
Brock University
St. Catharines, Ontario L2S 3A1
Telephone (416) 684-7201

Faculty of Business
McMaster University
Hamilton, Ontario L8S 4L8
Telephone (416) 525-9140

Deadline for Registration
Students register with the Institute as soon as they are employed by a CA office approved for the training of students. Applicants must also comply with the university registration dates for extramural students enrolling in degree courses. Details should be obtained from the university chosen by the applicant.

Fees
Students can obtain information about university course fees directly from the university of their choice.

In addition, students must pay the Institute's registration fee when they enter the program and an annual fee each year thereafter. In 1983 these fees are $75 and $104 respectively. The fee for the Institute's School of Accountancy is $693 and the final examination fee is $446 for 1983.

Student Salaries
Chartered accounting students are full-time employees of practising firms. The salaries paid to them are fully competitive with salaries which may be offered in any other positions open to them.

Further Information
For further information, please contact
Director of Education
The Institute of Chartered Accountants
of Ontario
69 Bloor St. E.
Toronto, Ontario M4W 1B3
Telephone (416) 962-1841

The Institute of Chartered Secretaries and Administrators in Ontario

Toronto

General Manager: R.W. Pogson, C.A.

The Institute of Chartered Secretaries and Administrators in Ontario (ICSA) is an international professional organization of executive administrators and the Ontario Institute is one of six provincial branches of the Canadian division. Although knowledge of the function of Secretary of the board of directors is a major requirement for ICSA examinations, a wide knowledge of public as well as business administration is also necessary. Members and students are employed in a wide variety of positions: university, hospital and school administrators; clerk-treasurers of municipalities and administrative positions to the level of deputy minister in the public sector; and president, vice-president, secretary, treasurer, comptroller, etc., in the private sector. Members of other professions such as lawyers and accountants have earned the ACIS (Associate) or FCIS (Fellow) designations.

Established in Canada in 1920, the ICSA is incorporated provincially (including Ontario) and federally. The current international membership of ICSA is approximately 50 000.

Although membership is obtained by passing examinations, graduates must also meet the standards of the position held and have the requisite number of years of working experience. If graduates cannot immediately meet such standards, they become a licentiate until such time as these qualifications are attained.

• Program of Study
Under the ICSA's syllabus a student must pass six management courses, which may be examined by approved institutions, and eight courses to be taken at an approved educational institution to be examined by ICSA. These courses may be taken either in class or by correspondence so that the educational institution can submit a transcript of marks to the ICSA. This transcript is necessary before the professional examinations may be written. Therefore, admission to the professional examinations is based on a combination of the admission requirements of the educational institution involved and the passing of six "entry" examinations.

A student is subject to the requirements of the universities or colleges before writing professional examinations. Exemptions are available and the well-qualified entrant may reduce the number of examinations to a minimum of five.

Registration
Before writing an Institute examination the student must be registered. Approximately 600 Canadian students register annually and the majority of these are in Ontario. The Ontario branch has chapters in Toronto and Ottawa. Because a primary objective of the ICSA is to train its members' successors, continuous liaison is maintained with students. Co-operating universities and colleges have their own deadlines for registration for lectures.

The ICSA holds examinations in May and December each year.

Student Awards
A gold medal is given each year to the graduating student who achieves the highest aggregate marks in examinations. Scholarships, prizes and other awards are open to competition on a national and branch basis.

Salaries
As the Ontario branch has senior executives and corporate secretaries of large corporations among its membership, as well as those in intermediate administrative positions and students beginning careers in management, it is not possible to establish a salary range even as an average; but most ICSA graduates earn salaries at least equivalent to those offered by accounting bodies.

Fees
Fees are assessed for the annual student registration, for students studying by lectures and for exemptions. Information may be obtained from the Secretary of Ontario Branch.

Services
The Institute regulates the professional standards of its members and students and only members may describe themselves as Chartered Secretaries and use the FCIS or ACIS designation after their names. At the various levels (division, branch and chapter) the ICSA offers a wide variety of services, including dinner and other meetings, a placement service, a journal and newsletter, conferences and seminars, research and information, and continuing education generally. Students are always invited to attend meetings of members.

Further Information
For further information please contact
The Secretary
Ontario Branch
The Institute of Chartered Secretaries
and Administrators
372 Bay St., Suite 509
Toronto, Ontario M5H 1R7
Telephone (416) 363-8925 or 363-8080

Kemptville College of Agricultural Technology

Kemptville

Principal: John D. Curtis

Post-secondary courses leading to diplomas in agriculture, agricultural engineering technician (AET), home economics, and food service supervision are offered at the Kemptville College of Agricultural Technology.

Enrolment 1982-83
Total 335

Admission Requirements
The Ontario Secondary School Graduation Diploma or equivalent is required. Effective September 1985, successful completion of Grade 12 English and mathematics at the advanced or general level will be required for admission. Applicants unable to meet the English or mathematics requirements but who have a good academic record will be considered.

Agricultural experience is recommended for all students registering in agriculture. Consideration is given to mature students.

Diploma Courses Offered

• Agriculture
Four semesters are usually required to cover the diploma curriculum. Students may elect to take areas of concentration in agronomy, animal science, horticulture, mechanics or general agriculture. Registration takes place in September.

Mature students may register for credit as full-time students, or as part-time students, taking individual subjects.

• Agricultural Engineering Technician
AET is a four-semester program providing practical scientific training in agricultural engineering. Students register in September. The first semester is identical to the agricultural program. The second semester is similar to the agricultural program with some additional required courses. With minor course adjustment, students may change to the agricultural program on completion of the first two semesters.

• Home Economics
This program, which may be completed in four semesters, covers a range of training to prepare graduates for management careers in food service and merchandising. Mature students may register for credit as full-time students or as part-time students taking individual subjects.

• Food Service Supervision
This program, which may be completed in four semesters, concentrates on subject areas in the food service industry related to the health care field. The course, approved by the Ontario Dietetic Association, qualifies graduates for immediate membership in the Canadian Food Service Supervisors' Association. Mature students may register for credit as full-time students or as part-time students taking individual subjects.

• Certificate Courses Offered
Agricultural equipment operator, agricultural equipment service, dairy herdworker, farrier (horseshoeing), bulk tank milk grader, milk and cream grader, milk and cream tester, and dairy

plant worker (specialization in cheesemaking, buttermaking, ice cream making or fluid milk processing).

• Apprenticeship Courses Offered
Farm equipment mechanics

• Community Programs Offered
A wide variety of courses, seminars, workshops and conferences are offered in response to the needs of the agricultural and food industry. Further information may be obtained by contacting the Continuing Education Section at the college.

Living Accommodation
The Kemptville College of Agricultural Technology will provide accommodation for most full-time students wishing to live on campus.

Financial Assistance
A number of bursaries are offered by charitable organizations, municipalities and individuals to deserving students. Special awards, scholarships and prizes amounting to several thousands of dollars are generously donated by benefactors each year. Students may also apply for grant/loan assistance from the Ontario Student Assistance Program. For details see the introductory section on financial assistance for students.

Tuition Fees
Canadian students per semester $165
Foreign students per semester $330
Room and meals, student activity fees, books and miscellaneous expenses bring the total to about $850-$950 per semester.

Further Information
Inquiries should be addressed to
Registrar
Kemptville College of Agricultural Technology
Kemptville, Ontario K0G 1J0
Telephone (613) 258-3411 ext. 332

New Liskeard College of Agricultural Technology

New Liskeard

Principal: D.W. Taylor

The college was established in 1967 to provide technical agricultural education to the people of northern Ontario. The campus is located within the town of New Liskeard, 160 kilometres north of North Bay.

Enrolment 1982-83
Total 65

Admission Requirements
Ontario Grade 12 or the equivalent is required with emphasis on mathematics, chemistry and other science courses. Applicants over 18 years of age and having less than Grade 12 standing will be considered on the basis of their experience and academic standing.

Diploma Courses Offered
Two week modular courses are taught consecutively from late September until the end of April. Teaching methods include lectures, laboratory exercises, practical projects, seminars, field trips and special management presentations.

Options are available in agricultural technology 'general), dairy cattle technology, equine technology, and livestock technology. Each option leads to a two-year diploma in agriculture.

Living Accommodation
Accommodation is available in a recently completed student residence on campus. Students may also arrange accommodation in private homes in New Liskeard or on surrounding farms.

Further Information
Inquiries should be addressed to
Principal
New Liskeard College of Agricultural Technology
New Liskeard, Ontario P0J 1P0
Telephone (705) 647-6701

The Niagara Parks Commission School of Horticulture

Niagara Falls

Superintendent: Roland Barnsley

The Niagara Parks Commission School of Horticulture was established in 1936 as a training school for apprentice gardeners. It has 100 acres of intensive garden developments. It is unique in several aspects, having retained many features of the apprenticeship system. It is funded from earnings of The Niagara Parks Commission, not by tax dollars. The school year commences in April in any year and the course of study extends for 36 consecutive months. The work or study week is 40 hours duration for all students other than those on special duty or foremanship served on a rotational basis. Accommocation is provided on the campus for the first two years.

The program is dedicated to a broad range of practical and academic skills related to the non-agricultural use of land and vegetation for human use and enjoyment with special reference to ornamental horticulture. The program prepares students for immediate responsibilities in the work place but in addition offers an optimum preparation for those students who aspire to further studies in horticultural sciences, landscape architecture and the administration of public and private lands. Courses are given in arboriculture, greenhouse management, floriculture, turfgrass maintenance, horticultural chemicals, Botanical sciences, entomolgy, drafting, surveying, soils, landscape design, English, human relations and small business management.

A substantial portion of the graduates find employment in the field of park maintenance and administration and an increasing number in private enterprise in the landscape, nursery and greenhouse industries, golf courses, horticultural sales. Others undertake graduate courses and teaching positions.

Enrolment 1982-83
Total 36 (12 per year)

Admission Requirements
A minimum of Grade 12 or its equivalent is required with a 60% average in English (4 years), mathematics (4 years), chemistry and biology (preferably 2 years of each).

Previous summer work experience in horticultural activity. The extent and nature of this work has an important bearing on candidates selection for admission.

A candidate must demonstrate that he is physically fit, a Canadian citizen, and has a commitment to a horticultural career. Enquiries or visits are encouraged at all times. Applications are accepted until June 30 each year for admission each April of the following year.

Program Offered
A three-year diploma program in general horticulture leading to the N.P.D. with practical work experience and academic training in equal balance. No options are offered. For curriculum see above.

Fees
Tuition fees are $625 per year. A deposit (refundable) of $600 is required on admission.

Residence Accommodation
Accommodation and prepared meals are provided on campus for the first two years at no charge. Third year students are required to live off-campus at their expense.

Student Financial Allowance
As partial compensation for the students' work effort an allowance is paid on a graduated scale for the three years (currently $26 – $28 – $30 per week).

Further Information
Write to
Admissions
School of Horticulture
The Niagara Parks Commission
P.O. Box 150
Niagara Falls, Ontario L2E 6T2
Telephone (416) 356-8554

Nursing Assistant Program

The nursing assistant program prepares the graduate to give nursing care to selected patients whose needs are stabilized, and to assist the registered nurse in the provision of care to individuals whose conditions are not stabilized. The registered nursing assistant performs his or her functions under the supervision of the registered nurse.

Programs are offered under four different auspices in Ontario. Nursing assistant programs may be taken at colleges of applied arts and technology, regional schools for nursing assistants, hospitals and some secondary schools. Upon successful completion of any of these programs the graduate is eligible for admission to the examination conducted by the College of Nurses of Ontario for registration and certification of nursing assistants in Ontario.

In all nursing assistant programs, planned clinical experience in a variety of health care settings is an integral part of the program and is supervised by teachers of the program. The programs, except for those in secondary schools, are generally 35 weeks in length.

Colleges of Applied Arts and Technology
Programs in colleges normally require completion of Grade 12 or the equivalent, or mature student status, that is, an applicant must be 19 years of age or older. Exceptions to the normal admission requirements are noted in parentheses.

Orillia and Owen Sound: Georgian College* (Grade 10)
Belleville: Loyalist College
Brockville: St. Lawrence College* (Grade 10)
Kingston: St. Lawrence College (Grade 10)
Guelph: Conestoga College* (Grade 10)
St. Thomas: Fanshawe College*
North Bay: Canadore College (Grade 10)
Oshawa: Durham College
Rexdale (Toronto): Humber College
South Porcupine: Northern College (Grade 10)
Windsor: St. Clair College

Regional Schools for Nursing Assistants.
Nursing assistant programs at regional schools admit students with a minimum of Grade 10 or the equivalent. The programs offered at the following regional schools are administered centrally by the Ministry of Education under the Provincial Schools Branch.

Hamilton: Regional School for Nursing Assistants
430 York Boulevard
Hamilton, Ontario L8R 1Y5
Telephone (416) 529-1187

London: Regional School for Nursing Assistants
205 York St., 2nd Floor, N6A 1B4
Telephone (519) 432-7506

Sudbury: Regional School for Nursing Assistants
40 Larch St., 3rd Floor, P3E 5M7
Telephone (705) 673-5001

Thunder Bay: Regional School for Nursing Assistants
1111 Victoria Ave., 2nd Floor, P7C 1B7
Telephone (807) 475-1615

Toronto: Regional School for Nursing Assistants
90 Gerrard St. W., 3rd Floor, M5G 1J6
Telephone (416) 965-2131

Hospitals
Hospitals generally admit students with a minimum of Grade 10 or the equivalent. Exceptions are noted in parentheses.

Collingwood General and Marine Hospital
Cornwall: Cornwall General Hospital (Grade 12 preferred)
Elliot Lake: St. Joseph's General Hospital (Grade 12 preferred)
Fort Frances: La Verendrye Hospital
Kenora: Lake of the Woods District Hospital (Grade 12 preferred)
Lindsay: Ross Memorial Hospital
Ottawa: Ottawa Civic Hospital (Grade 12)
Ottawa: St. Vincent Hospital – French and English (Grade 11)
Scarborough (Toronto): Scarborough General Hospital (Grade 12 preferred)
Sturgeon Falls: West Nipissing General Hospital, in French; (17 years of age – Grade 12, over 17 years – Grade 10)
Wingham: Wingham and District Hospital

Secondary Schools
The following secondary schools offer nursing assistant programs in Grades 11 and 12. These programs are taken concurrently with other secondary school courses.

London: H.B. Beal Secondary School
Newmarket: Huron Heights Secondary School
Peterborough: Kenner Collegiate Vocational Institute
Toronto: Central Technical School

Financial Assistance
Student nursing assistants at colleges of applied arts and technology and at the regional schools for nursing assistants administered by the Ministry of Education, Provincial Schools Branch, are eligible to apply for assistance from the Ontario Student Assistance Program. Assistance under the Ontario Student Loans Plan is available to nursing assistant students at approved hospitals. For further information on these government assistance programs, see the introductory section in *Horizons* "Financial Assistance."

Further Information
For further information on nursing assistant programs, contact the institution offering the program of your choice.

For information on other health sciences programs, refer to the CAAT chart, the university chart, or the section on the Toronto Institute of Medical Technology in this directory.

*Part-time programs available.

Ontario College of Art

Toronto

President: Clifford C. Pitt

For more than one hundred years, it has been the purpose of the Ontario College of Art to educate those who will become professional artists and designers. In that time curricula and emphases have changed to meet the challenge of changing times, as they will continue to do, but the fundamental quality of the college has remained constant: from the beginning, OCA has been a place where leading artists and designers meet and work with students to explore the complex processes of creation that art and design involve.

Enrolment 1982-83

	Undergraduate	Graduate
Full-time	1 300	25
Part-time	1 800	–

General Admission Requirements
Candidates for the AOCA diploma (Associate of the Ontario College of Art) must possess the minimum academic admission requirements of the Ontario Secondary School Graduation Diploma or its equivalent. Due consideration is given to additional academic achievement, relevant experience, and specialized education in art or design. Applicants lacking this academic standing may be admitted as mature students if they are at least 21 years of age. An interview is required and it is strongly recommended that applicants bring a portfolio. Applications for admission in September 1984 will be closed April 15, 1984. Applications from foreign students will be closed March 31, 1984.

• Undergraduate Program
The college grants the AOCA diploma upon graduation from the four-year program (32 credits).

In first year, the student is introduced to a broad variety of ideas, approaches, media, materials, methods, processes and applications through the program of the Department of Foundation Studies. This program is designed to heighten perception and awareness and to develop visual creativity. The compulsory courses include: drawing, two-dimensional design, three-dimensional design, media, colour and a lecture/seminar course. After first-year, the student may take one of two approaches: a general studies program which allows free choice among all of the offerings available in the various departments, or a specialist program which permits concentration upon a particular area or areas of study with a single department. Specialist programs of study may be undertaken in the departments of: Communication and Design, Design, Experimental Arts, Fine Arts, Photo/Electric Arts, and Industrial Design. It is possible to change from one program to another under certain conditions.

Liberal Arts Studies offers courses designed to complement the student's studio activities. These include art history, dance, English, music history, philosophy, theatre arts, anthropology, history and psychology.

The Technological Studies Department offers credit courses in media and materials, process and system, fabrication, and construction and casting methods. It is made up of 14 diversified areas of laboratory and working studios: film, graphic film (animation), holography, light laboratory, sound laboratory, radio, metal, mould making and foundry, photography, plastics, print making, reproduction and type, and wood.

Detailed program and course descriptions are listed in the college calendar, available through the Registrar's Office.

Each student will have a faculty advisor who will assist in choosing courses and in formulating long-range program objectives. The advisor will be concerned with developing with the student an on-going and open communication to foster overall progress and general welfare.

Students in years 2, 3 and 4 will choose their advisors from among the faculty members. When possible, this advisor will be one of their course instructors. Students are expected to meet individually with their advisor at least once a month.

• Graduate Program
The Ontario College of Art offers a fifth year of study to students holding the A.O.C.A. Diploma or its equivalent. The program is designed to provide students with a year of intensive study in one of the fields of concentration offered in the college program. While no further diploma is awarded, a statement indicating the nature and duration of study is provided at the end of the year.

• Part-time and Evening Programs
The college can accommodate a limited number of part-time students within the regular daytime program.

A variety of credit courses is offered during the evenings and in the summer. Admission requirements, evaluation procedures, and credit requirements, for part-time students are the same as those applying to students in the full-time program. Further information and course descriptions are available from the Registrar's Office.

The Teaching of Art in Ontario
In order to teach in the elementary or secondary schools of Ontario, a candidate must hold an approved Bachelor's degree from an Ontario university, or its equivalent, and complete one year of teacher education.

For persons who do not possess a degree, the only route to certification for teaching art in Ontario schools is that leading to the Ontario Teachers' Certificate, Technological Studies (Commercial or Fine Art), which qualifies the holder to teach Grades 9-12.

This certificate requires the Ontario College of Art Diploma, a minimum of two years related work experience and a one-year course at a faculty of education.

Transfer Credit Arrangement with the University of Guelph
Depending on the academic qualifications on admission to the college, and on the courses taken, students who graduate with the Ontario College of Art Diploma are usually credited with one to one-and-a-half years in the University of Guelph's three-year BA program. Because of the trimester system at the University of Guelph, it is possible for the OCA undergraduate to pursue BA studies by taking the spring semesters at Guelph, usually May 1 to August 15, following the completion of the OCA regular session in April. In short, it is possible for a student to obtain both the AOCA diploma and the University of Guelph BA degree in less than four full years of study. This possibility will be of particular interest to those who wish to teach art in Ontario schools.

Special arrangements are being made with other universities. Interested students should consult with the Registrar.

Tuition Fees (1983-84)
Total $964
Total yearly fee for applicants outside Canada is $3 190.

Financial Assistance
Students in financial need may apply for assistance through the Ontario Student Assistance Program (see introductory section on financial assistance for details). Both full- and part-time students may apply; depending on course load and financial need, they may qualify for grant or loan or a combination of both.

Further Information
Admission inquiries should be addressed to
R. T. Begley, Registrar
Ontario College of Art
100 McCaul St.
Toronto, Ontario M5T 1W1
Telephone (416) 977-5311

For information about campus visits or schools liaison, please contact
Ms. Kathleen Sharpe
Information Officer
Ontario College of Art
100 McCaul St.
Toronto, Ontario M5T 1W1
Telephone (416) 977-5311 ext. 236

Ridgetown College of Agricultural Technology

Ridgetown

Principal: J.A. MacDonald

Ridgetown is midway between London and Windsor, in the centre of the prosperous farming area of western Ontario.

It has modern facilities for agricultural teaching which include laboratories, a library, greenhouses, and agronomy, student residence, and livestock buildings. There is a college farm of 182 hectares for demonstration and research purposes.

Enrolment 1982-83
Total 373

Admission Requirements
The Ontario Secondary School Graduation Diploma or equivalent is required for admission to diploma courses. Mature students with less than the Ontario Secondary School Graduation Diploma will be considered on individual merit.

Diploma Courses Offered
The academic year at Ridgetown is divided into two terms and the programs are two years in length. Terms begin in September and January and each term is a prerequisite for the next.

• Agricultural Production and Management
This program is designed to provide training for careers in both the business of farming and positions in the expanding agricultural industry. The course consists of a basic core of subjects plus electives. Majors can be taken in field crops and livestock or in field and horticultural crops. Through selection of electives the students may direct their area of emphasis toward their chosen field of study.

• Agricultural Laboratory Technology
This program is designed to train students in fundamental laboratory principles and techniques and their application in the agriculture and food industry. It consists of basic subjects but the emphasis is on the laboratory aspects of agriculture. Employment opportunities exist in research, testing and quality control in connection with food processing, meat and milk products, agricultural chemicals, fertilizers, feeds and seeds.

• Agricultural Business and Commerce
This program trains people in the provision of clerical and stenographic services as they apply to farm business. It concentrates on the record keeping aspects of today's farms and includes basic core subjects necessary to understand the operations of most farm businesses.

Financial Assistance
A number of bursaries and scholarships, ranging from $50 to $200 each, are awarded annually to students requiring financial assistance. In addition, almost $5 000 is made available by special county awards, service club donations, memorial and scholastic awards and prizes. Students may also apply for grant/loan assistance from the Ontario Student Assistance Program. See introductory section on financial assistance to students.

Living Accommodation
Students live on campus in Steckley Hall.

Fees
Tuition is $350 per year divided as follows: $175 per term (two-term year). Room and 14 meals per week, student activities fees, books, tuition and miscellaneous expenses amount to $1 470 per year. Weekend meals are available at extra cost.

Tuition fees for those without Canadian citizenship or landed immigrant status are $700 per year.

Further Information
Please address further inquiries to
Principal
Ridgetown College of Agricultural Technology
Ridgetown, Ontario N0P 2C0
Telephone (519) 674-5456

The Society of Management Accountants of Ontario

Hamilton

Executive Director: R.W. Dye, RIA, FSMAC
The Society of Management Accountants is the professional body devoted to the training, accreditation, and continuing development of RIA Management Accountants. The RIA Program, available through the Society, is the only accounting program that specializes exclusively in the decision-making needs of management. In order to receive the RIA designation, the required academic program outlined by the Society along with a minimum two years of practical work experience must be completed. This extensive training qualifies RIAs to provide vital expertise in financial planning, operations control, management information systems, internal auditing, data processing and analysis and long term organizational development. With this background the RIA Management Accountant often moves directly into a position of responsibility within an organization.

The Society of Management Accountants of Ontario, is one of 11 affiliates across Canada through which men and women may earn the nationally recognized RIA designation. Enrolment in Ontario currently exceeds 11 000 students. Women now make up over 40% of the new enrollees in the program, and this percentage is growing.

• Program of Study
The program's academic level is equivalent to a combination of post-secondary school undergraduate and graduate specialist study. Course materials and examinations are uniform throughout Canada, thus facilitating transfers between provinces for both students and accredited members.

The program provides basic accounting skills and a knowledge of the accounting and taxation procedures required by organizations for their external reporting needs (financial accounting). In addition, RIA studies provide a thorough understanding of the accounting skills required in the management decision-making process and the control of operations (management accounting). Because today's RIA Management Accountants are such integral members of the management team, several related courses designed to enhance management insights and skills are also included in the curriculum (for example, organizational behaviour, management processes, data processing, information systems, economics and law).

• Route to RIA Accreditation
Most students now prefer to complete a university or college study program before enrolling with the society. All post-secondary schools in Ontario offer courses which can earn exemptions from several of the RIA program subjects. Some schools also offer co-operative programs in management accounting or joint-lecture programs with The Society of Management Accountants of Ontario. Contact the school directly for more information on the availability of these programs.

All 18 of the society's subject modules are available by enrolling directly with the society. The society offers lecture courses at many post-secondary schools in Ontario. All subjects are also offered by correspondence at least twice each year.

Professional accreditation is earned only after successfully completing each subject module (by examination through the SMA, or by exemption for equivalent post-secondary studies) and demonstrating an ability to apply skills and knowledge through at least two years of related work experience. This practical experience is frequently gained while students are completing the senior levels of their RIA studies.

Admission Requirements
Grade 12 graduation (or its equivalent) is the academic minimum for admission to the first level of the RIA program.

Graduates of other professional associations (universities and colleges – particularly of business and accounting programs), are usually eligible for several exemptions based upon the quality of the candidate's performance in equivalent courses studied at recognized educational institutions. The society's exemption policy guidelines for individual post-secondary schools and other professional associations may be obtained by contacting the society's registrar.

Salaries
The RIA students, at the junior to intermediate level can expect to earn $15 000 to $20 000 annually; at the senior course levels, salaries will probably increase to the $25 000 + range. Upon accreditation as an RIA, the annual income normally ranges over $30 000. Subsequent increases will be related directly to personal abilities and the degree of responsibility assumed, but there is virtually no limit to the amount of money that may be earned.

Professional Services
The 23 local chapters of the Society of Management Accountants in Ontario all hold regular meetings and seminars on matters of professional concern to accredited and student members. Members may also take advantage of such society services as the comprehensive lending library and research facility at the National Office in Hamilton, and the employment referral service available through the Toronto Regional Office and also operated by many chapters. Other services include: *Cost and Management*, the society's journal on management accounting practice and managerial control, the *RIA Digest* reprint service and news digest, an annual National conference, a distinguished lecture tour, and the publication and distribution of many of the society's research studies.

Further Information
For further information please contact the Registrar at one of the following offices
Society of Management Accountants
of Ontario
20 Victoria St., Suite 910
Toronto, Ontario M5C 2N8
Telephone (416) 363-8191

Society of Management Accountants
of Ontario
154 Main St. E.
P.O. Box 2150
Hamilton, Ontario L8N 3C3
Telephone (416) 525-4100

Society of Management Accountants
of Ontario
410 Laurier Ave. W., Suite 609
Ottawa, Ontario K1R 7T3
Telephone (613) 238-8405

Toronto Institute of Medical Technology

Toronto

Executive Director: Dr. D.M. Schatz

The Toronto Institute of Medical Technology is a specialized post-secondary educational institution offering programs in various health technologies. From its beginning in 1966, with one program and 16 affiliated teaching hospitals, it has grown to include six full-time programs and more than 40 affiliated hospitals. It also has a large Extension Division which offers post-graduate courses for working technologists.

Each full-time program is actively supervised by an advisory council, which consists of medical specialists and technologists from affiliated hospitals, institute teaching staff and student representatives. It is the responsibility of the advisory councils to ensure that the programs meet the needs of health care and provide the basis for advanced study. Similarly, advisory committees in each specialty assist the Extension Division to identify and meet the needs for continuing education.

The Toronto Institute's building, in downtown Toronto, features specialized laboratory design and modern equipment which offer excellent facilities for training in the medical technologies.

A medical technologist should enjoy work of a technical nature and have an interest in sciences. Health workers must possess a sense of responsibility and be able to work carefully and accurately. The ability to work co-operatively with colleagues and to deal with patients effectively and sympathetically is important.

Enrolment 1982-83
Full-time 278

Programs Offered

• Medical Laboratory Assistant

One-year certificate
This one-year program is designed to produce graduates capable of performing routine technical procedures under the supervision of registered laboratory technologists. Before the establishment of this program, medical laboratory assistants were trained on the job within the hospital environment, and did not possess any recognized qualifications. Recent increases in the scope and volume of investigations carried out by hospital laboratories have expanded the role of laboratory assistants and created a need for formal training.

Admission requirements
Ontario Secondary School Graduation Diploma (OSSGD) with mathematics and chemistry at the Grade 12 level and mathematics and one other science at the Grade 11 level.

Students from outside Ontario must have the equivalent educational standing.

• Cytotechnology

Two-year diploma
The cytotechnologist is responsible for preparation of the various specimens submitted to the laboratory and for careful microscopic examination of the material for cellular changes and abnormal cells. The work is supervised by pathologists, either in a hospital laboratory or in a centralized screening centre. While many of the duties are routine they offer great personal satisfaction. Cytology is a specialized diagnostic service, which is seldom of an emergency nature, therefore most cytotechnologists work a five-day week and generally do not work evenings or weekends.

Admission requirements
Ontario Secondary School Honour Graduation Diploma (OSSHGD) which must include pass standing in mathematics, chemistry and one of biology or physics. Students who intend to enter the cytotechnology program are advised to take biology as the second science. Students with an OSSGD who have completed an appropriate first year in a college of applied arts and technology, including mathematics, chemistry and one other science, may apply for equivalent standing.

Students from outside Ontario must have the equivalent educational standing.

• Diagnostic Radiography

Two-year diploma
The two-year training program is organized jointly by the Toronto Institute of Medical Technology and the affiliated teaching hospitals. An orientation period in a hospital is followed by further training in theory and practice at the Toronto institute. The student spends a considerable portion of his two years obtaining clinical education in an affiliated hospital.

Admission requirements
An OSSGD including the following advanced level credits from Grade 11 or 12: two mathematics, two English or French, one physics and one of either chemistry or biology. Two additional sciences at either the general or advanced level are required.

Students from outside Ontario must have the equivalent educational standing.

Note: This program commences in September.

Mature students
A candidate who does not meet the above educational requirements, but who is 19 years of age or over and has resided in Ontario for at least one year, must apply to write the mature student examination. If successful the candidate may then apply to enter the program.

• Medical Laboratory Technology

Two-year diploma
The current rapid advances in technological knowledge make laboratory technology, one of the oldest established medical technologies, an interesting and challenging career. A laboratory technologist is an important part of the health team because physicians have come to depend on the results of laboratory tests to aid them in the diagnosis of disease and in selection of appropriate treatment. In fact, the practice of modern medicine would be impossible without the facilities of the laboratory. Medical laboratory technology is divided into five major specialties: clinical chemistry, haematology, histotechnology, immunohaematology, and microbiology.

Admission requirements
An OSSHGD including mathematics, chemistry and one of biology or physics. Students who intend to enter the medical laboratory technology program are advised to take biology as the second science. Any of the three proposed mathematics courses for secondary schools will be acceptable; however, the most appropriate course is mathematics 1, dealing with functions and relations.

Students with an OSSGD who have completed an appropriate first year in a college of applied arts and technology, including mathematics, chemistry and one other science, may apply for equivalent standing.

Students from outside Ontario must have the equivalent educational standing.

• Nuclear Medicine Technology

Two-year diploma

The nuclear medicine technologist is responsible for the safe and accurate performance of diagnostic tests involving the use of radionuclides. These tests may be divided into two categories: *in vitro* testing involves the use of radioactive chemicals to make analyses of specimens in a laboratory remote from the patient; *in vivo* testing involves the administration of radioactive materials to a patient, followed by specific testing to determine body function. Both types of testing provide answers which aid the physician in determining the nature and extent of disease, thereby helping him to decide on the proper treatment.

Admission requirements

An OSSHGD including the following advanced level credits in Grades 11, 12 or 13: two mathematics, two English, one chemistry, one physics, and two additional sciences. Students who have an OSSGD with the above credit requirements and who have completed an appropriate first year program in a college of applied arts and technology including mathematics and science may apply for equivalent standing.

Students from outside Ontario must have the equivalent educational standing.

Mature students

A candidate who does not meet the above educational requirements, but who is 19 years of age or over and has resided in Ontario for at least one year, must apply to write the mature student examination. If successful the candidate may then apply to enter the program.

• Respiratory Technology

Two-year diploma

The respiratory technologist is trained to assist the physician in the diagnosis, treatment and management of patients with respiratory and associated disorders.

Training is carried out co-operatively by the Institute and affiliated hospitals. This program is covered in 20 months; 10 months of instruction at the Institute followed by 10 months of clinical education in an affiliated hospital.

During the first year of training, the student expands his knowledge of basic science in the areas of anatomy, physiology, chemistry, physics, pathophysiology and pharmacology. Practical training is co-ordinated with the theoretical part of the courses, during which the student learns how to use a wide variety of modern respiratory equipment. A period of three weeks is spent in the hospital setting to observe the clinical practice of respiratory technology.

The clinical year provides the student with practical training in an affiliated hospital. The student learns to perform techniques and procedures under actual working conditions.

Admission requirements

An OSSGD with advanced level credits in Grade 12 English, mathematics and chemistry and Grade 11 physics.

Students from outside Ontario must have the equivalent educational standing.

Past experience has shown that it is advantageous for the student to have one additional year of secondary or post-secondary education including biology, chemistry and mathematics.

Tuition Fees

First year full-time $520
Second year full-time $520
Fees may be subject to change.

Living Accommodation

As the Institute has no residence, students are responsible for finding their own accommodation. Students from outside Toronto are advised to find accommodation close to the subway or close to the Institute itself, possibly in one of the student residences located in central Toronto. The Admissions Department will forward a list of possible residences on request.

Food Services

The Institute has cafeteria facilities which operate during the academic year, Monday to Friday, 8 am to 2:30 pm. Students may purchase breakfast, light refreshments and a hot meal. Vending machine service is available at other times.

Health Service

The Health Service is staffed by a public health nurse, who offers emergency first aid and a preventive medicine program. The nurse is available for confidential counselling on all types of health problems.

Student Placement

A placement service is offered to assist graduates in finding employment. Any student who requires assistance in finding employment should register with the placement service.

Financial Assistance

Students in financial need may apply for assistance from a variety of sources. Further information may be obtained from the Registrar's Office.

Further Information

Further information may be obtained from
The Admissions Office
Toronto Institute of Medical Technology
222 St. Patrick St.
Toronto, Ontario M5T 1V4
Telephone (416) 596-3143

Correspondence Study

Learning by correspondence offers an accepted alternative to enrolment in regular full- or part-time study programs. People who are unable to attend regular school sessions have the option of continuing their studies in a variety of fields and at different levels. Many people who have missed higher education in the past, who need upgrading, refresher or work-related courses, or who, for interest, wish to continue their education, benefit from correspondence study.

In Ontario, correspondence teaching is offered by four types of institutions:

1) Correspondence Education Branch of the Ministry of Education
2) Private vocational schools (private correspondence schools)
3) Universities
4) Colleges of applied arts and technology.

The Ministry of Education offers courses by correspondence in addition to the regular elementary and secondary school programs. Private vocational schools provide those unable to attend school full-time with the opportunity to gain job entry skills. University correspondence courses offer an alternative method of study for degree credit, a professional upgrading of general interest, while colleges of applied arts and technology offer correspondence teaching primarily in the business field.

Learning by correspondence allows a certain freedom with respect to time and place of study and a degree of independence and flexibility with respect to study habits. However, students thinking about study by correspondence should carefully consider the discipline and motivation that are required to progress without personal contact with teachers and fellow students and without benefit of school facilities.

• Universities Offering Correspondence Courses

University of Guelph
Laurentian University
University of Ottawa
McMaster University
Queen's University
University of Waterloo
The University of Western Ontario

The variety of university subjects which may be studied by correspondence is limited and the number of credits which can be obtained is usually less than that required for a degree or diploma, necessitating further studies as a regular student. The University of Waterloo and Queen's University, because of the range of courses availabe through the correspondence format, are able to grant degrees through courses taken entirely by correspondence. Because a student is removed from the university campus, there is little or no direct interaction with other members of the class or with the teacher, and the use of the university library is curtailed. However, most universities will attempt to contact a student who is experiencing extreme difficulty, and some offer weekend seminars two or three times a year to assist with problems. Most universities also provide reading lists to facilitate the use of alternative resource centres.

University correspondence courses are usually closely tied to the normal academic calendar and conditions including admission requirements, tui-

tion fees (average $155) and academic standards are similar to those for regular students.

Academic programs by correspondence may be pursued over an extended period of time, but the normal workload per term is usually a maximum of two courses. Students may, in most cases, combine and/or alternate correspondence work with regular attendance, in compliance with the individual institution's residence requirement for the granting of a degree.

Each course normally requires a final exam which counts as a percentage of the final grade. These are written at a major centre close to the student's home or in isolated areas under the supervision of a responsible person appointed by the university.

Students who wish to take correspondence courses at one university for credit toward a degree at another institution should consult the particular institutional authorities. Some universities may not recognize correspondence courses as credit toward a degree.

Correspondence courses are also offered by universities throughout Canada, credit for which may be accepted by a university in Ontario granting a degree.

For more particular information on courses, application procedures and types of credit granted, students should consult the individual institutions.

University of Guelph
The University of Guelph offers an opportunity to earn a diploma in agriculture or a diploma in horticulture through correspondence study. The Ontario Ministry of Agriculture and Food sponsors this program allowing opportunity for specialization in such areas as animal production, crop production, general agriculture, fruit and vegetable production, nursery operations, landscape contracting, commercial floriculture, turf management, park horticulture and park management.

Courses can be started at any time, as the program is open-ended and the majority of students elect courses for up-dating or to acquire knowledge in areas not previously studied. For those wishing to earn a diploma it is necessary to complete approximately 15 courses in a specialized area of the student's choice.

Tuition for each course ranges between $55 and $125 and includes the complete study package. The majority of courses utilize contemporary text materials and a study outline and several are offered as multi-media packages containing graphically illustrated notes, and supported with audio cassettes and filmstrips that may be hand viewed.

A letter of acknowledgement is provided upon the completion of each course and the Ontario Diploma in Agriculture or the Ontario Diploma in Horticulture is granted upon the successful completion of the diploma requirements.

Further information
Independent Study
University School of Part-Time and Continuing Education
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-4120 ext. 3375

The University of Guelph also offers several courses by correspondence at the degree level. The current list of available courses includes: personal and family finance, land economics, introductory psychology, death, dying, and ageing, human sexuality, financial accounting, and many others.

The program is expanding and although an entire degree is not available, students are able to benefit by taking courses from some of the unique departments of this University.

Send for a Guelph Distance Education Calendar
Room 153, Johnston Hall
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-1330.

Laurentian University
Laurentian University offers 35 courses by correspondence, with more being planned. Four of these form part of the university's extension program in Native studies. In addition to the above correspondence courses, Laurentian University offers ten multi-media courses with television as the prime mode of delivery of instruction. These courses, like the correspondence courses, are all credit courses counting towards a university degree.

A continuing education student may also take courses either during the day or the evening during the winter or may attend the evening spring session or the six-week summer session.

Laurentian University also offers courses in some 20 different centres throughout northeastern Ontario where students may pursue their university programs.

Students who wish to take correspondence or television courses from Laurentian must first obtain general admission to the university.

Correspondence courses and television courses generally involve readings and regular assignments throughout the term. Senate regulations stipulate that at least 40 per cent of the final mark is to be determined by supervised examinations which include a mandatory final evaluation upon completion of the course. Examiners are provided by the university and every effort is made to see that students do not have to drive long distances to reach an examination centre. The university, however, cannot guarantee that this will always be the case for each individual.

For information on the correspondence courses
Centre for Continuing Education and
Part-Time Studies
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 500

For information on admission requirements
Office of Admissions
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 302
Toll free 1-800-461-4030

McMaster University
Correspondence courses are available on a year-round basis. This allows students to begin their studies at a time convenient to them.

The correspondence courses offered are for the following certificate programs only:
1. Human Services Certificate (with a variety of possible specializations)
2. Municipal Administration Program.

The cost for correspondence studies is $180 per course plus a Part-time Student Association fee of $7.50. No registration is complete until fees have been paid in full. Total fees must accompany the registration.

Persons aged 65 and over may register without payment of a fee; however, a nominal fee of $25 for administration and materials must eventually be paid.

It is recommended that students take no more than two full subjects in one study period. Students who wish to take more than two subjects must secure permission from the School of Adult Education.

Further information
Dr. L. Oddie Munro
Director, School of Adult Education
Commons Building, 116
McMaster University
1280 Main St. W.
Hamilton, Ontario L8S 4K1
Telephone (416) 525-9140 ext. 4891

University of Ottawa
The University of Ottawa offers a number of correspondence courses, both in English and in French.

Not more than five correspondence courses can be applied toward a degree at the University of Ottawa. The remaining courses must be taken in residence at the university, either full- or part-time.

Following the sessional dates of the regular academic calendar, correspondence students may not normally take more than one calendar year to complete a full course. Evaluation for correspondence is normally by final examination immediately upon completion of the course.

Tuition fees are $184 for a full-course and $92 for a half-course.

Further information
Correspondence Division
University of Ottawa
165 Waller St.
Ottawa, Ontario K1N 6N5
Telephone (613) 231-2391

Queen's University
Queen's University has been offering correspondence programs in the humanities and social sciences since 1889.

Queen's does not have a residence requirement making it compulsory for students to take a certain number of courses for the degree by lecture on campus. Each correspondence course counts as a credit toward a degree in the same way as does the equivalent course given on campus. It is possible to complete the fifteen courses required for a three-year Bachelor of Arts degree with a minor concentration in German, political studies or psychology entirely through correspondence study. However, not all courses required for all concentrations are offered by correspondence; therefore, it will be necessary in some instances for a student to attend classes on campus to complete the degree requirements.

Each correspondence course is based on a study guide consisting of (1) an introduction giving the student pertinent information concerning textbooks, materials, and a general outline of the course, and (2) a series of lessons, varying in number according to the course, which must be completed and returned for correction and grading in the appropriate academic department. Correspondence courses require a final examination; some also require progress tests.

Admission requirements to the correspondence program are the same as the regular admission requirements for the university.

Final date for admission
New students must submit application forms and all supporting documentation by September 1. Applications received after September 1 will be processed as resources permit, but no guarantee can be given.

Final dates for registration
Students are urged to register in correspondence

courses by September 1, although registrations will be accepted up to September 15. The Division of Part-time Studies cannot guarantee that registrations accepted after September 1 will be cleared in sufficient time for the student to receive the course outline, order books, and then begin the course on schedule.

On first registration, only one course may be taken.

Tuition fees, $186 per correspondence course, cover registration, lectures, laboratories, use of the libraries, grading of examinations and the final examination and telephone privileges.

Fees are waived for all persons 65 or over who register for credit courses.

Further information
Admissions Officer
Division of Part-time Studies
Faculty of Arts and Science
Queen's University
Kingston, Ontario K7L 2N6
Telephone (613) 547-3283

University of Waterloo
Several undergraduate degrees in arts, environmental studies, mathematics and science can be obtained completely by correspondence from the University of Waterloo. Special pre-university courses are also available.

University of Waterloo correspondence courses are recorded on audiotape cassettes accompanied by course notes and other visual materials where required. These, together with assigned problems, are prepared by the professor to explain and supplement material provided in the texts.

Most of Waterloo's correspondence courses are the one-term half-credit courses, comprising approximately 20 taped lectures of 40 minutes duration, each with accompanying lecture notes. Students generally take two half-credit courses per term although they may take from one to a maximum of five half-credit courses per term.

There is no limit to the time which may be taken to complete a degree on a part-time basis. However, students doing degrees on a part-time basis will be treated in the same manner as full-time students in that no student will be allowed an indefinite number of failures while accumulating the number of course credits required for a degree.

Credits toward degrees
Unless otherwise stated all of the following may be taken entirely by correspondence, or as a combination of correspondence, regular and summer courses.

Faculty of Arts
General Bachelor of Arts degrees: majors in classical civilization, economics, English, geography, history, philosophy, psychology, and non-major.

Each requires 30 half credits (15 full courses), the equivalent of a three-year degree when taken full-time on campus.

Correspondence students are required to pass the English Language Proficiency Examination which is written after completion of 8 of the 15 credits (16 of the 30 term courses) required for a general Bachelor of Arts degree.

Faculty of Environmental Studies
Bachelor of Environmental Studies (Geography)

Requires 32 half-credits (16 full courses), the equivalent of a three-year degree when taken full-time on campus.

Faculty of Mathematics
Bachelor of Mathematics Pass Degree

Requires 32 half-credits including 12 mathematics half-credits, the equivalent of a three-year degree when taken full-time on campus.

Bachelor of Mathematics General Degree

Requires 42 half-credits including 24 mathematics half-credits, the equivalent of a four-year program when taken full-time on campus. This degree cannot be obtained solely on a correspondence or part-time basis. A student must spend at least two four-month terms on a full-time basis on campus, before the degree is granted.

Faculty of Science
Bachelor of Science (general, non-major)

Requires 30 half-credits of which at least 16 must be science half-credits, the equivalent of a three-year program when taken full-time on campus.

Bachelor of Science (general, major)

Requires 40 half-credits of which at least 16 must be in the major field, the equivalent of a four-year program when taken full-time on campus. This degree program may be taken entirely on a part-time basis combining correspondence and summer courses for laboratory work.

Pre-university courses
Correspondence learning packages are available in chemistry, mathematics and physics for students who wish to qualify for university level courses but do not have the necessary high school prerequisites. The pre-university courses are non-degree non-credit courses which can be used to gain admission to degree programs at the University of Waterloo.

The courses are designed to last four months; however, students may study at their own pace. Two examinations must be taken, one at the mid-point and one at the end of the course unless otherwise stated. A student may begin at any time and apply to write the examinations when ready.

Tuition fee for the pre-university course is $120 plus a fee of $40 for tapes (refundable upon return).

Normally, University of Waterloo correspondence courses are not available to people with mailing addresses outside Canada and the United States.

Students over the age of 60 who are Canadian citizens or permanent residents will be awarded a university bursary to cover tuition and incidentals for credit courses (not including correspondence tape fee and cost of textbooks). Proof of eligibility for the bursary should be included with the application.

Application deadlines are:
Fall term 1983 August 12th
Winter term 1984 October 21st
Spring term 1984 February 17th

Further information
Correspondence Office
University of Waterloo
Waterloo, Ontario, Canada N2L 3G1
Telephone (519) 885-1211 ext. 3901

The University of Western Ontario
The University of Western Ontario offers correspondence courses in arts, science and social sciences. Applicants must be either Canadian residents or Canadian citizens living abroad.

The University of Western Ontario does have a residence requirement for students wishing to qualify for a 15-course Bachelor of Arts degree. The maximum number of courses which may be taken by correspondence toward a degree is ten; the remaining five must be taken either intramurally or at a Western University Off-Campus Centre. Students may take a maximum of two full courses (or equivalent) during the summer session (May – August).

Students registered at other universities may request permission to take correspondence courses at The University of Western Ontario for transfer of credit toward their home university. Students who wish to take courses in this manner must obtain a Letter of Permission naming the specific courses from the registrar of their university.

The tuition fee for all credit courses is approximately $230, payable at the time of registration.

Further Information
Correspondence Supervisor
Faculty of Part-time and Continuing Education
The University of Western Ontario
London, Ontario N6A 5B8

For students wishing to take correspondence courses who have not previously attended Western, applications are available from
Office of the Registrar – Admissions
Stevenson-Lawson Building
The University of Western Ontario
London, Ontario N6A 5B8
Telephone (519) 679-2314

• Correspondence Courses at Colleges of Applied Arts and Technology
Learning by correspondence through the colleges of applied arts and technology is little used as an alternate method of study. In keeping with the colleges' mandate for increased community involvement, emphasis has been placed on part-time and continuing education as the alternative to regular day-time study. Part-time and evening programs are offered by all the colleges at their various campus locations.

There are, however, colleges which do offer correspondence study as an additional study opportunity. Admission requirements are similar to college entrance requirements: satisfactory standing in Ontario Grade 12 or proof of qualification as a mature student (19 years of age and over).

Algonquin College
Algonquin College offers correspondence courses drawn from the three-year Business Administration Diploma program. Many of these courses are also requirements for certificate programs offered by the Business Division.

Students may take at least 29 courses by correspondence, allowing completion, by mail, of the equivalent of two years of the Business Administration Diploma program. Students may then attend the college full-time for two semesters (eight months) in order to qualify for a diploma. There are now five correspondence courses which are available in French.

Tuition fees, $65 per course, include general information, assignments and supplements to the course textbook. Each course is approximately three months in duration. Examinations are held six times per year, in locations convenient for the student.

Further Information
Continuing Education Section,
Business Division
Algonquin College of Applied Arts
and Technology
1385 Woodroffe Ave., Room B290
Ottawa, Ontario K2G 1V8

Canadore College

For information contact
Chairman, Part-time Stuidies
Canadore College
P.O. Box 5001,
North Bay, Ontario P1B 8K9
Telephone (705) 474-7600

Centennial College
Centennial offers a correspondence program, "Ophthalmic Assistant Home Study", endorsed by the Canadian Opthalmological Society. Entrance requirements for the two-phase Certificate program are:
1) Current employment under the supervision of an Ophthalmologist
2) An OSSGD (or equivalent) or mature student status.

The $65 fee for each course includes course materials (except textbooks) and examinations.

Further information
Health Programs
Continuing Education Division
Centennial College
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 694-3241 ext. 404

Conestoga College
Conestoga's Home Study Program provides students with an opportunity to gain the requirements necessary in mathematics and English for admission to post-secondary programs. After a brief initial testing, students work on their assignments at home. Some tests must be written at the college. The cost is $50 for a 20-week program. There are no entrance requirements, but all candidates are interviewed be teachers before registration. Students may enrol at any time providing the program is not filled.

Further information
Conestoga College of Applied Arts and Technology
Continuing Education – Waterloo Campus
435 King St. N.
Waterloo, Ontario N2J 2Z5
Telephone (519) 885-0300

Fanshawe College
Fanshawe College offers correspondence programs for the Institute of Municipal Assessors of Ontario. Under certain circumstances, these courses can be used as credits towards a Fanshawe College Diploma in Urban Affairs and Real Estate-Assessment Major.

The college also offers correspondence courses for engineering technicians who wish to meet the technologist certification requirements of O.A.C.E.T.T. In addition, a range of mathematics courses are available on a home study basis.

Further information
Dean, Continuing Education
Fanshawe, College
P.O. Box 4005
London, Ontario N5W 5H1
Telephone (519) 452-4435

Humber College
Humber College offers a modular correspondence program in developmental disabilities. This program consists of 16 courses. Each course contains a 30-hour self-study section and a seminar. Seminars are conducted across the Province.

Further information
Continuous Learning
Humber College
Box 1900
Rexdale, Ontario
M9W 5L7

Northern College
Three correspondence courses are offered at the Kirkland Lake Campus of Northern College. Introductory accounting and accounting principles II may be taken as credits for the business administration program. Credit for a power systems and machinery course may be applied towards the electrical technology program.

Tuition for the business courses is $60. For the power systems course tuition is $65.

Further information
Continuing Education Department
Northern College
140 Government Rd. E.
Kirkland Lake, Ontario P2N 3L8

Seneca College
The Continuing Education division offers systems maintenance – building environmental systems through correspondence study. This course is designed specifically for persons employed in the servicing of large office and/or apartment building complexes. Examples of subjects covered are pipe systems and water treatment.

Further information
Registrar – Continuing Education Division
1750 Finch Avenue East
Willowdale, Ontario M2J 2X5
Telephone (416) 493-4144

St. Lawrence College
St. Lawrence College at Kingston offers a 15-week correspondence course in family home day care.

Further information
Human Studies Department
St. Lawrence College at Kingston
Portsmouth Ave.
Kingston, Ontario K7L 5A6

• Private Vocational Schools
There are a number of private vocational schools in Ontario, registered under the Private Vocational Schools Act, which offer correspondence training. These schools aim to provide practical training in the skills employers demand.

Private correspondence schools, in business in Ontario for many years, are helping to fill the need for vocational training for those unable to attend regular classes. Individual students as well as employer-sponsored students are attracted by their varied and flexible programs.

The activities of these institutions in terms of course offerings, length of training, and fee per course vary a great deal ($100 to $5 000) depending on the nature of the courses being offered and the resources which are available to each private school. Some of the courses offered consist of a combination of residence and correspondence instruction, the residence portion usually comprising the latter part of the course.

The section in *Horizons*, "Private Vocational Schools", contains a directory list of all the private vocational schools registered in Ontario. Section 2 lists programs available by correspondence. The code numbers accompanying each course listing refer to the schools in the directory list, which offer that course.

• Education by Correspondence, Ministry of Education
Education by correspondence is available as an extension of the regular school program at the elementary and secondary school levels. Study by correspondence benefits a wide variety of students: mature students who wish to further their education, complete secondary school, gain admission to university, college, or training courses, or earn promotion in their employment; persons who wish to study, for personal satisfaction, subjects related to their interests, hobbies, or employment; third-, fourth- and fifth-year public secondary school students who wish to supplement their school programs; students temporarily absent from the province who wish to maintain continuity in their education; and students who are legally excused from school.

Elementary and secondary school courses are provided free of charge to Ontario residents. Textbooks for students taking Grade 13 courses must be purchased.

Courses may be started at any time and completed at the student's own rate. All certificates and diplomas granted have the same validity as those issued by the elementary and secondary schools.

At the secondary school level courses are available in business studies, English, français, French and German, geography, history and social sciences, Latin and classical studies, mathematics, science, technical subjects, and visual arts. Elementary school correspondence courses, similar to those studied by students in school, are provided. Adults who have not completed elementary school but who wish to do some work to prepare for enrolment in secondary school should apply for two specified courses, one in English and one in mathematics.

Further Information
Correspondence Education Branch
909 Yonge St.
Toronto, Ontario M4W 3G2
Telephone (416) 965-2657

• Accountancy Courses
The Certified General Accountants Association of Ontario and the Society of Management Accountants of Ontario offer correspondence courses which, upon graduation, lead to the designation Certified General Accountant CGA and Registered Industrial Accountant RIA respectively.

Through the CGA Association, a course of study is offered in such management studies as financial management, information systems, and controllership. The program of study is primarily by correspondence, supplemented by lectures in different locations throughout the province.

The course is national and all subjects are identical in each province.

For further information on the CGA program of study, on admission requirements and on the organization, please refer to the section on the CGA Association in *Horizons*.

The Society of Management Accountants offers the only professional education course designed specifically for the field of management accounting in business and government. Available by correspondence or evening lecture, this five-level study program leads to the designation RIA. The RIA course teaches the concepts and techniques of management accounting, law, statistics and other relevant areas of financial management.

For further information on the society, the admission requirements and on the courses required, please refer to the section on the Society of Management Accountants in *Horizons*.

• Open College
Open College, the educational service of radio station CJRTFM, 91.1, offers students convenient alternatives to classroom study. This fall and winter, students can earn degree credits at home by listening to radio or cassette tapes.

A tutor is assigned to help students with the course material. During each course there are two weekend study sessions conducted at Ryerson. These sessions give students a chance to talk with instructors, tutors and other students. Course assignments are mailed in to Open College and mid-term and final examinations are written at Ryerson.

Further Information
Open College
297 Victoria St.
Toronto, Ontario M5B 1W1
Telephone (416) 595-0485

Facilities for Disabled Students

Ontario Colleges and Universities

Almost all public post-secondary institutions in Ontario are at least partially able to accommodate the needs of disabled students. Both universities and colleges have made efforts to increase the accessibility of on-campus post-secondary education.

In recent years many new buildings have been designed to be accessible to the disabled and, where possible, older buildings are being modified with ramps, accessible washrooms and other special facilities.

Some institutions have more complete facilities than others, but all are willing to make arrangements, where possible, for individuals with special needs. Residence facilities can be arranged at most universities and at a few of the colleges, and specially designated parking areas are available at most institutions. In general, recreational facilities which can accommodate disabled students are limited. The availability of special study aids and resource materials varies from school to school, and students are advised to carefully consider what special study facilities are available when selecting the institution they wish to attend.

• Universities

Brock University
Special services and equipment for disabled students at Brock include the following: taped books, liaison with the Audio Visual Program (Trent University), a study room in the library with a braille dictionary, closed carrels, chemistry laboratory apparatus and a modified computer terminal for wheelchair students, and priority in parking and housing arrangements. The new olympic size pool has a moveable floor at one end to facilitate entry to and exit from the water. Pamphlets with pertinent information are available from
The Assistant Registrar
Brock University
St. Catharines, Ontario L2S 3A1
Telephone (416) 688-5550

Carleton University
Carleton University is totally accessible through connecting tunnels (elevators at tunnel level) and main entrances to buildings. Three residences (Russell, Glengarry, and Grenville) are accessible with elevators and have facilities for a limited number of disabled students requiring attendant care. Special equipment and services include the following: connections with the Audio Library Program (Trent University) for taped books, accessible washrooms in all buildings, special parking arrangements, a modified pool to facilitate entry to and exit from the water, and an active Awareness Club that promotes awareness in the university community and also assists in orientation tours. The Co-ordinator of the Program for the Disabled is available to provide information on special services for disabled students.
For more information contact
Co-ordinator, Program for the Disabled
Health Services
Carleton University
Ottawa, Ontario K1S 5B6
Telephone (416) 231-3657

University of Guelph
Disabled students attending the University of Guelph have access to door-to-door van services provided by the city of Guelph. Guelph's library is fully accessible with turnstiles which permit the passage of wheelchairs. Taped books and full-size graduate study carrels equipped with lockers are available for the disabled. Newer buildings and one residence are easily accessible, while older buildings are being modified with special grants from the Ministry of Colleges and Universities. The Counselling and Student Resource Centre at Guelph helps disabled students adjust to the emotional and social demands of university life. For more information contact
Counselling and Student Resource Centre
University Centre, Level 3
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-4120 ext. 3244

Lakehead University
All newer buildings at Lakehead are accessible and older buildings are being modified with ramps and curb cuts. The city of Thunder Bay provides Handi-vans for use by disabled students. Permits for special parking areas are also available. For more information contact
Information and Media Services Director
Lakehead University
Thunder Bay, OntarioP7B 5E1
Telephone (807) 345-2121 ext. 300

Laurentian University
Buildings at Laurentian University (including residences) are fully accessible. The olympic pool at Laurentian has a hoyer-lift, the washrooms can accommodate wheelchairs, and the showers and pool have support bars. Housing priority is given to disabled students. For more information contact
Director of Communications and Development
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 541

Nipissing University College's College Education Centre in North Bay is equipped with: ramps, elevator and washrooms accessible to disabled students. Special parking areas are also available. Residences are not wheelchair accessible, and special equipment and services are limited.
For more information contact
Information Officer
Nipissing University College
P.O. Box 5002
Gormanville Road
North Bay, Ontario P1B 8L7
Telephone (705) 474-3450 ext. 2327

McMaster University
Although there are two academic buildings which are not accessible to disabled students, all classrooms, all but two of the residences, and most washrooms at McMaster are accessible. The university has made a substantial commitment of resources and financial support over the next five years to improving the facilities to ensure the accessibility of the campus and the academic programs. Provisions for the disabled include the keeping of guide dogs in the residence, a work room for blind students (readers on request from the volunteer bureau), liaison with Trent University's Audio Library Program, and special stickers for all parking zones. Each faculty has a person responsible for making any special

academic arrangements. For more information contact
Assistant to the Registrar
McMaster University
Hamilton, Ontario L8S 4L8
Telephone (416) 525-9140 ext. 4455

University of Ottawa
Most buildings at the University of Ottawa are linked by a series of elevated passageways. An optascope and taped books are available in the central library. For more information contact
Director, Student Services
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-3311

Queen's University
At Queen's University students are invited to contact the Co-ordinator of Services for the Disabled to discuss their particular needs. Although all buildings are not accessible, arrangements can be made to have flexible programming of class time and/or location. The Bottrell Library has designated audio-visual facilities, and carrels and rooms for tapes and films. Disabled students have priority in housing, and designated parking spaces are available. For more information contact
Co-ordinator of Services for the Disabled
Queen's University
Kingston, Ontario K7L 3N6
Telephone (613) 547-2640

Ryerson Polytechnical Institute
At Ryerson, all major buildings are accessible by wheelchair. Several buildings have accessible washrooms. The library provides a number of extended services for the disabled, and is accessible by wheelchair. Neill-Wycik College, a student co-op residence, is accessible by wheelchair, and provides special arrangements for the disabled, depending on specific needs. Ryerson's main parking lot reserves parking spaces for the disabled.

Ryerson's Student Services Department will provide detailed information on special services and facilities for disabled students. A complete list of transportation services that operate within the City of Toronto is also available. Student Services representatives are available to help disabled students become acquainted with the campus, or to assist them in completing the registration process. For further information contact
Director of Student Services
Ryerson Polytechnical Institute
50 Gould St.
Toronto, Ontario M5B 1E8
Telephone (416) 595-5280

University of Toronto
University of Toronto disabled students have access to door-to-door van service provided by the Toronto Transit Commission. Newer buildings, especially at the Scarborough and Erindale Campuses, and those in which there have been major renovations are accessible. Also, each year additional buildings on the St. George Campus are retrofitted. There is a recognized campus group (Access U of T) comprised of students, staff, faculty and alumni, non-disabled and disabled, with the objective of making university buildings, programs and services more accessible. Access can be a valuable support group for disabled students currently enrolled or contemplating application. A Co-ordinator of Services to Disabled Persons has been appointed by the university to provide liaison (upon request) with academic and administrative departments and to co-ordinate a volunteer service to assist in note-taking, reading, research, mobility and errands. Special provisions include the keeping of seeing eye dogs in the residences, 3 reserved soundproof carrels on the St. George Campus (equipped with 2 "Visualtek" machines, 3 tape-recorders, 1 brailler and 1 typewriter) where print disabled students may be read to or may listen to tapes, liaison with the Trent Audio Library and the PAL reading service located at OISE. An F.M. System is available for loan by hearing impaired students. The University publishes *Services to Disabled Persons, University of Toronto Library – A Guide for the Disabled* (print and tape form) and *A Revised Guide to the Physical Accessibility of the University of Toronto* (1981) Hearing Impairments. For more information contact
Co-ordinator of Services to Disabled Persons
140 St. George St.
University of Toronto
Toronto, Ontario M5S 1A1
Telephone (416) 978-3011 (voice);
978-3337 (T.D.D.)

Trent University
Most academic and residental buildings at Trent have ramps and accessible washrooms. The university has developed an extensive library of audio-tapes as part of Trent's Audio Library Program. Several universities maintain liaison with the program to provide audio-tape services to their students. Needs of disabled students can usually be met because of the student/teacher relationships possible at Trent. For more information contact
James English
Director of Student Services
Trent University
Peterborough, Ontario K9J 7B8
Telephone (705) 748-1215

University of Waterloo
Disabled students attending the University of Waterloo have access to door-to-door van services provided by the city of Waterloo. All buildings have at least one ramped entrance. Most buildings have accessible washrooms or are linked to a building that does. The university has made fourteen single rooms wheelchair accessible in one of its women's residences and the same number of rooms accessible in one of its men's residences. Disabled students are given housing priority and may request an in-residence trial period to evaluate their living conditions. Both libraries are wheelchair accessible and provide rooms where students may work with readers, tape information or listen to tapes. A Kurzweil reading machine, a brailler and special micro-reader lenses are available. An Advisor on Services for Disabled Persons has been appointed to determine the needs of disabled students who use the campus and to ensure that these needs are met. For more information contact
Advisor on Services for Disabled Persons
Needles Hall
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 2130
TTY/TOO (519) 886-6250 (non-voice)

University of Western Ontario
Disabled students attending the University of Western Ontario have access to door-to-door van services provided by the city of London. The majority of buildings and one co-ed residence are accessible, while other buildings are being modified for accessibility. Two residence apartments are equipped to accommodate disabled students. Western operates a braille computer terminal which gives students access to computing facilities and many on-campus library reference materials, and can assist students in the preparation of course materials, essays, etc. A President's Advisory Committee has been established to deal with the problems facing disabled students at Western. A disabled Students' Resource Centre is available, as well as an ombudsman who acts on behalf of students with special needs. For more information contact apartments are equipped to accommodate disabled students. Western operates a braille computer terminal which gives students access to computing facilities and many on-campus library reference materials, and can assist students in the preparation of course materials, essays, etc. A President's Advisory Committee has been established to deal with the problems facing disabled students at Western. A disabled Students' Resource Centre is available, as well as an ombudsman who acts on behalf of students with special needs. For more information contact
Director, Student Services
The University of Western Ontario
London, Ontario N6A 5B8
Telephone (519) 679-2408

Wilfrid Laurier University
The Central Teaching Building, the library, Frank C. Peters Building, and the Seminary are accessible. Classroom and examination assistance is provided as well as reserved parking. Special assistance of any kind is available upon request through the:
Office of the Dean of Students
Wilfrid Laurier University
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 319

University of Windsor
All buildings at the University of Windsor have ramps for easy accessibility. Two residence halls (MacDonald for men and Laurier for women) have ground floor accommodations for disabled students, including accessible washrooms. An on-campus volunteer service bureau provides readers. For more information contact
Dean of Students
University of Windsor
Windsor, Ontario N9B 3P4
Telephone (519) 253-4232 ext. 332

York University
Ramps, elevators and curb cuts make 85% of the York University Campus accessible. Arrangements can be made through the Centre for Handicapped Students to give access to the few places that are not accessible. Disabled students are given priority in both undergraduate residence and graduate apartments on campus. Some modifications can be made to apartments to accommodate special needs. Students are responsible for arranging their own attendant care. Services provided by the Centre for Special Services for Handicapped Students include the following: pre-university, academic, mobility, and personal counselling; mobility tours; orientations and a volunteer referral service. Other services provided by York include essay writing and study skills assistance, career counselling services, library tours, a visual-tek in the library, a four-track cassette player, a cassette player with varispeech control, and a reel-to-reel recorder. Special parking permits are available, as well as a publication produced by the Centre for Handicapped Students entitled, *Services for Handicapped Students at Universities and Community*

Colleges in Ontario. For more information contact
Centre for Special Services for Handicapped Students
Room 135, Behavioural Sciences Building
York University
4700 Keele St.
Downsview, Ontario M3J 1P3
Telephone (416) 667-3312

• Colleges

Algonquin College
Facilities for disabled students at Algonquin College include the following: generators at the Woodroffe Campus for the use of students in electric wheelchairs; ramps for easy accessibility to the buildings at the Woodroffe, Heron Park and Rideau campuses and to the Applied Arts Building; elevators at the Woodroffe, Parkdale Nursing and Colonel By campuses; and accessible washrooms at the Woodroffe and Heron Park campuses. The U.O.V.S. (Pembroke), the Lorrain Nursing Campus (Pembroke), and the Lanark Campus (Perth) are presently being modified for accessibility. A special parking area is reserved for disabled students at the Woodroffe Campus, and individual parking arrangements for other areas can also be made. For more information contact
Registrar
Algonquin College
1385 Woodroffe Ave.
Ottawa, Ontario K2G 1V8
Telephone (613) 725-7517

Cambrian College
Located in Sudbury, Cambrian College's main campus features a ramp entrance, electrically controlled doors to facilitate entry by wheelcahir, modified washrooms, and elevator keys for those who have difficulty negotiating stairs, telephones at wheelchair level and special parking areas. Ramps have also been installed at the Regent St. Campus to allow free access to the laboratories and the residence. For more information contact
Dean, Student Services
Cambrian College
1400 Barrydowne Rd., Station A
Sudbury, Ontario P3A 3V8
Telephone (705) 566-8101 ext. 390

Canadore College
Canadore College's College Education Centre in North Bay is equipped with an elevator and washrooms accessible to disabled students. Residences are not wheelchair accessible, and special equipment and services are limited. For more information contact
Director, Student Services
Canadore College
P.O. Box 5001
North Bay, Ontario P1B 8K9
Telephone (705) 474-7600 ext. 2199

Centennial College
At Centennial College all counsellors provide career, academic and personal counselling for disabled students. All of the college buildings are accessible with at least one accessible washroom per floor. As well, there are specially designated parking spaces for the disabled. Individual arrangements can be made for special services and equipment, and for keys for the elevators. For more information contact
Director of Student Services
Centennial College
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 694-3241 ext. 251

Conestoga College
The Doon Campus of Conestoga College offers a number of facilities for disabled students including reserved parking spaces, ramps which make the college fully accessible, special washrooms, and service elevators which provide access to the cafeteria and to classrooms on the third and fourth floors. Cassette recorders for the blind and the learning disabled are also available. Special orientation sessions are held. The athletic complex is designed to accommodate disabled participants and spectators. For more information contact
Career Services
Conestoga College
299 Doon Valley Dr.
Kitchener, Ontario N2G 4M4
Telephone (519) 653-2511 ext. 279, 366

Confederation College
Facilities for disabled students at Confederation College are many and include reserved parking spaces, ramps, special washrooms, and service elevators for access to the cafeteria and the above ground floors. Confederation College's residence and fitness centre are designed to accommodate the disabled. Special services and equipment can be arranged according to individual requests. For more information contact
Registrar, Post Secondary Programs
Confederation College
P.O. Box 398
Thunder Bay, Ontario P7C 4W1
Telephone (807) 475-6110
N.W. Ontario residents can call
toll free 1-800-465-6961 or 465-6962

Durham College
While most buildings at Durham College have limited access to some facilities, the Adult Training Building is totally accessible and is equipped to accommodate disabled students. Reserved parking is available. For more information contact
Registrar and Director of Student Affairs
Durham College
Simcoe St. N.
Oshawa, Ontario L1H 7L7
Telephone (416) 576-0210 ext. 254

Fanshawe College
Counsellors at Fanshawe College offer brief orientation programs to all disabled students at the college. Most of the college buildings are accessible. At the main campus special parking, washroom and elevator arrangements can be made on request. An information brochure is available. For more information contact
Registrar
Fanshawe College
P.O. Box 4005
London, Ontario N5W 5H1
Telephone (519) 452-4100

George Brown College
Some buildings at George Brown are equipped with elevators and special washrooms for disabled students. The college offers a unique program for the deaf which includes pre-registration survival lectures, special guidance into regular classes, and tutoring, counselling and interpretive services. As well, sports facilities for the hearing impaired are available. Special parking arrangements can be made. For more information contact
Director, Student Services
George Brown College
P.O. Box 1015, Station B
Toronto, Ontario M5T 2T9
Telephone (416) 967-1212 ext. 236, 253

Georgian College
Georgian College provides most special equipment and services upon individual request. Four buildings have ground level accessibility and the Central Services Building has an elevator and special washroom facilities. For more information contact
Director, Student and Community Services
Georgian College
One Georgian Dr.
Barrie, Ontario L4M 3X9
Telephone (705) 728-1951 ext. 210

Humber College
Humber College's North Campus is equipped with ramps, reserved parking spaces and a "drop off" location, as well as modified washrooms and an elevator making it completely accessible to wheelchair students. Lakeshore 1 is accessible and is equipped with an elevator to the 2nd floor and two washrooms have been converted. Lakeshore 2, Osler and Keelesdale all have entrance ramps, converted washrooms and Keelesdale has a reserved parking space. For more information contact
Registrar
Humber College
P.O. Box 1900
Rexdale, Ontario M9W 5L7
Telephone (416) 675-3111 ext. 297

Lambton College
The main campus at Lambton College is equipped with ramps, elevators, automatic doors, special telephones and drinking fountains, and modified washrooms. Reserved parking spaces and an on-campus residence which can accommodate disabled students are also available. In addition, Lambton has developed special learning resources material in certain fields. With the help of college staff, students who require tapes and readers in order to study may locate various sources of information. For more information contact
Registrar and Director of Student Services
Lambton College
P.O. Box 969
Sarnia, Ontario N7T 7K4
Telephone (519) 542-7751 ext. 295

Loyalist College
Most of Loyalist College is accessible to disabled students. One main building is equipped with a freight elevator. Special parking areas are readily available, and special services and equipment are provided on an individual program basis. No residence facilities are available. For more information contact
Registrar
Loyalist College
P.O. Box 4200
Belleville, Ontario K8N 5B9
Telephone (613) 962-9501 ext. 204

Mohawk College
Most of the buildings at Mohawk College are accessible and are equipped with ramps, a large elevator and special washrooms. Residence facilities are not available, but housing assistance is provided by the College Housing Office. Priority in parking is given to disabled students. Individual arrangements for special services and equipment can be made by contacting the Counselling Centre at (416) 389-4461 ext. 327 or Health Services at (416) 389-4461 ext. 325. For more information contact
Registrar
Mohawk College
P.O. Box 2034
Hamilton, Ontario L8N 3T2
Telephone (416) 389-4461 ext. 415

Niagara College
The Welland Campus of Niagara College offers a number of facilities to disabled students such as reserved parking spaces, ramps, special washrooms, and service elevators which provide access to third and fourth floor classrooms. Arrangements for special services and equipment can be made on an individual basis. Priority in parking is given to disabled students. For more information contact
Registrar
Niagara College
Woodlawn Rd., P.O. Box 1005
Welland, Ontario L3B 5S2
Telephone (416) 735-2211 ext. 213

Northern College
Northern College's Porcupine (Timmins) Campus is accessible with ramps and is equipped with access washrooms. Readers can be provided for the disabled in co-operation with the CNIB, and the library is fully accessible to wheelchairs. Residence facilities are not available, but the college works with sponsoring agencies to provide special equipment and services. Parking arrangments can be made on request. The Kirkland Lake Campus can accommodate disabled students, but the Haileybury Campus has no special facilities. For more information contact
Publicity and Planning Officer
Northern College
Highway 101, P.O. Box 2002
South Porcupine, Ontario P0N 1H0
Telephone (705) 235-3211 ext. 134

St. Clair College
Most of St. Clair College is easily accessible with elevators and special washroom facilities. Moveable classroom desks which accommodate wheelchairs are available. The City of Windsor provides Handi-Transit Bus Lines for disabled students. The Department of Continuing Education offers night school programs for disabled students. Special needs of disabled students are dealt with on an individual basis through the Counselling and Health Services Department. It is possible to make arrangements for parking adjacent to the main entrance. No residence facilities are available. For more information contact
Director of Student Services
St. Clair College
2000 Talbot Rd. W.
Windsor, Ontario N9A 6S4
Telephone (519) 966-1656 ext. 412

St. Lawrence College
Certain parts of St. Lawrence College are equipped with ramps and are accessible to disabled students. Elevator keys are available for students in wheelchairs and accessible washrooms are also available. Residence facilities are not available, but special parking areas are reserved at the Brockville and Kingston campuses. All St. Lawrence College campuses offer sign language courses to interested students. For more information contact
Registrar
St. Lawrence College
2288 Parkedale Ave.
Brockville, Ontario K6V 5X3
Telephone (613) 345-0660

Sault College
Sault College in Sault Ste. Marie features a ramp entrance, modified washrooms and elevator keys for those who have difficulty negotiating stairs. Housing facilities are not available. Special parking facilities are available to provide easy access to campus buildings. For more information contact
Admissions and Records Office
Sault College
P.O. Box 60
Sault Ste. Marie, Ontario P6A 5L3
Telephone (705) 949-2050 ext. 215

Seneca College
At Seneca College, the King Campus is fully accessible by ramps. The Sheppard Campus, a one-storey building is accessible. The Dufferin Campus is equipped with elevators. Special parking areas are available at all of the campuses.

Although the Newnham Campus is a multi-building, multi-storey facility, there is an elevator available for handicapped students. Special arrangements can usually be made for handicapped students to take most of their courses in accessible rooms. For more information contact
Registrar
Seneca College
1750 Finch Ave. W.
Willowdale, Ontario M2J 2X5
Telephone (416) 491-5050 ext. 227

Sheridan College
Facilities for disabled students at Sheridan College include ramps, elevator keys and special washrooms. The Sheridan College School of Crafts and Design in Mississauga, is built so that all craft studios are located on one level, thus facilitating easy access. For more information contact
Registrar
Sheridan College
Trafalgar Rd.
Oakville, Ontario L6H 2L1
Telephone (416) 823-9730 ext. 148

Sir Sandford Fleming College
The Brealey and Frost facilities of Sir Sandford Fleming College are accessible with ramps, elevators and special washroom facilities. The McDonnel facility, an older building, provides washroom facilities and limited ramp access on main floors. The Continuing Education program at the McDonnel and Frost campuses offer courses in sign language. For more information contact
Student Services Director
Admissions Office
Sir Sandford Fleming
School of Natural Resources
Frost Campus
Box 8000
Lindsay, Ontario K9V 5E6
Telephone (705) 324-9144

Admissions Office
Sir Sandford Fleming College
Sutherland Campus
526 McDonnel St.
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620

Native Studies

This section concentrates on post-secondary courses that may be of particular interest to Native people and to non-Native people who wish to improve their appreciation of Native society and cultures. For Native students, this section may also serve as a guide to special opportunities for completing or complementing post-secondary education.

Courses of study described here are offered by Ontario colleges of applied arts and technology and Ontario universities and include programs developed to meet specific needs of Native people. Certain adult-training and apprenticeship programs that Native people have found particularly useful for improving their employment prospects are also outlined in this section.

The Native Studies section details practical training that can be valuable for those who want employment in community, social and correctional services or in Native associations and band council associations and businesses dealing with or within Native communities.

Special University Programs

- **Diploma Program in Journalism for Native People**

University of Western Ontario
This is a three term program which begins in May and covers a full calendar year.

To be eligible for admission, applicants must meet the university's regular admission requirements or they may apply as mature students. In order to be considered as a mature student, an applicant must have at least Grade 10 or the equivalent. Applicants should have some experience in journalism and should be committed to working in the field of communication. As well, a letter of recommendation from a recognized national, provincial or territorial native organization must be submitted. Students are expected to be competent in English and may be required to furnish proof of their proficiency.

The deadline for completed applications is January 15.

- **Geography**

Carleton
Northern Lands

- **Law**

University of Ottawa
Queen's University
University of Toronto
The University of Western Ontario
University of Windsor
York University
All Ontario university law schools encourage applications from Native people in order to expand meaningful legal representation on their own behalf.

In order to ensure a reasonable chance of academic success, the law schools fully endorse the special pre-law summer orientation program for Native students at the University of Saskatchewan. Those who have not completed this program but show marked potential for advancement may be accepted.

Qualified status Indian students are eligible to receive the full range of financial support benefits provided by the federal Department of Indian and Northern Affairs, for both the pre-law and the law

school programs. Similar assistance is provided for Métis and non-status Indian students by the federal Department of Justice.

• Native Studies Programs
Carleton
Law and Native Peoples of Canada

Laurentian University
Laurentian University offers a general Bachelor of Arts general program in Native studies through the Department of Native Studies of the University of Sudbury which is federated with Laurentian.

The program is intended to acquaint students as fully as possible with the situation of Native people, especially those of Canada. To this end, studies range from pre-Columbian time, through the arrival of the Europeans to present day renaissance, and cover education, legal rights, language, the application of ancient insights to modern sociological and ecological problems, and twentieth century aspirations.

The aim of the program is to bring the students into direct contact with the area being studied. Artifacts, films, tapes and other audiovisual resources are used, oral literature is studied and field trips are arranged. Representatives of the Native population are invited to take part in the program.

University of Toronto, Erindale College
Erindale College offers a major (three-year) program that examines the cultures of the past and present, as well as the history and theoretical framework of the interaction of Native and colonizing peoples. The program is interdisciplinary, combining the courses and approaches of anthropology, history, sociology, and geography. It complements programs with interest in North American studies, ethnic/racial history, and environmental studies. Students may pursue special interests through an independent study course.

• Social Work
Carleton University
The School of Social Work at Carleton University has a special program to bring Native students into the Master of Social Work program.

The program entails two years of full-time study, although students may proceed on a part-time basis. There is also provision for an internship training of three to six months.

Students are assessed for admission on the basis of both their academic and personal suitability to eventually undertake work in this area. A Bachelor of Arts degree is not essential for this graduate program, but students should have completed at least one or two years of study at a university or college of applied arts and technology. Admission is open to Native students from all over Canada.

• Sociology and Anthropology
Carleton
Anthropology of the Polar Basin
The Ethnography of New World Indians and Eskimos
The Prehistory of New World Indians and Eskimos
Selected Problems in the Study of New World Indians and Eskimos

• Summer Employment Program (1984)
Confederation College
McMaster University
Trent University
University of Toronto
*The University of Western Ontario**
The program is designed to acquaint Native secondary school students with the kind of environment in which they might find themselves if they decide to continue their studies at the post-secondary level by providing meaningful employment for these students on a university or college campus.

The summer employment program for Native students offers the following advantages:
1) permits Native students to become familiar with a post-secondary institutional environment;
2) offers summer employment opportunities to Native students;
3) offers assistance to university and/or college staff by enabling them to hire summer help.

Note: The lack of contact and familiarity with the post-secondary institutional environment is a significant factor in Native students' not continuing their studies at the post-secondary level, even when they are academically qualified and financially in a position to do so.

• Teacher Education
Teacher Education programs for Native people have been instituted at two universities in Ontario: Lakehead University and Laurentian University. These programs are intended to increase the number of Native teachers. Also, skilled teachers of Native ancestry will be of great assistance in responding to the needs of children in the schools in Native communities.

Lakehead University
Lakehead University offers a two-year undergraduate diploma program in teacher education for Native people. The purpose of the program is to increase the number of qualified Native teachers in northwestern Ontario and to prepare these teachers to meet the special social and cultural needs of Native communities. Diploma graduates will be recommended for an Ontario Teacher's Certificate. Lakehead University also offers a Native Language Instruction Program designed for individuals who will instruct either (a) individuals whose first language is Algonquin or (b) individuals whose native language is a second language to English.

Admission to the teacher education program will be granted to Native students recommended by one of the following organizations:
– individual Band Councils
– the Ontario Métis and Non-status Indians Association or any of its local branches.
– the Union of Ontario Indians
– the Association of Iroquois and Allied Indians
– Grand Council Treaty No. 3
– Grand Council Treaty No. 9

Candidates must, in addition, hold an Ontario Secondary School Honour Graduation Diploma with an overall average of at least 60%; or satisfy the requirements for adult admission to Lakehead University.

Laurentian University
The Faculty of Education at Nipissing University College offers a one-year consecutive program leading to a Bachelor of Education degree. This program prepares candidates for teaching in Ontario schools and meets the requirements of the Ministry of Education for teacher certification.

As part of this program students may take an optional course entitled, "Study Groups in the Education of Native Canadians." This course is an introduction to curriculum construction for schools attended by children of Native Canadian ancestry. Although this course does not lead to a special certificate, it does provide an opportunity for practice teaching in Manitoulin Island reserve schools or in small Native communities bordering on James Bay.

Admission to this program requires an approved degree from an accredited university.

A Native Classroom Assistant Certificate is granted to successful graduates of a program offered at the Laurentian Campus by the Faculty of Education, Nipissing University College, in cooperation with the Department of Native Studies.

The program consists of three non-credit five-week courses, each to be taken in a separate summer session.

The program is open to persons of Native Canadian ancestry who have been selected by the responsible authorities of their reserves.

For further information write to the Dean of Education, Nipissing University College, Box 5002, North Bay, Ontario P1B 8L7.

• Transitional Year Program
University of Toronto
For information on this program please refer to the University of Toronto section.

Financial Assistance
Detailed information on financial assistance may be obtained from the financial aid administrator of the institution or from:
Student Awards Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 2B4
Telephone (416) 965-5241

Adult Training and Apprenticeship Programs
Manpower programs are offered by training centres which are generally operated through the colleges of applied arts and technology. The adult training and apprenticeship programs include programs specifically designed for, or adapted to, the needs of Native people. Information regarding the adult training programs is handled by representatives of the colleges of applied arts and technology who are in contact with Chiefs, Band Councils, Locals and individuals within the communities. Program information is also provided by the province for circulation through all Canada Employment centres.

Adult training programs are provided for persons wholly sponsored by the provincial and/or federal governments, to partially sponsored students, and to those who wish to pay their own fees and seek financial assistance through the Ontario Student Assistance Program (OSAP). Information on sponsorship can be obtained from the Canada Employment centres, social counsellors, Band Councils and the Department of Indian Affairs and Northern Development.

Almost 300 adult training and apprenticeship programs are currently offered and a list can be obtained from the colleges of applied arts and technology or from the College Affairs Branch of the Ontario Ministry of Colleges and Universities. Many programs can be made available on the reserves. Programs requiring special facilities, however, are not offered outside established training centres.

• Specific Employment Programs for Native People
Several programs have been established in partnership with the Canada Employment and Immigration Commission to promote prospects of employment for Native people. These programs are offered through established training centres and may be offered on a reserve where feasible.

*Also offered at Fanshawe, Mohawk, Sault, Seneca, Sir Sandford Fleming, and St. Clair.

Appliance Servicing
Mobile teaching services will be taken to the reserves to teach the Native people appliance servicing, with an emphasis on the use of propane gas.

Academic Upgrading
Academic upgrading concentrates on the communications, mathematics and science required to obtain and hold employment or to enter a skill program which leads to employment. Generally, individualized instruction is available so that the students may start at any time during the program and proceed at their own rate of learning. Life skills may be used in academic upgrading to assist the student to overcome earlier learning problems. Some programs are directly oriented to Native students and are taught on the reserves.

Band Management
An "outreach" approach to Band Management has been developed by Confederation College. A pilot program in Fort Frances has been very successful.

Building Custodian (Certified)
Northern College has adapted the College Affairs Branch urban program for janitors to be employed by Indian Affairs for their schools located on Indian reserves.

Business and Commerce
Northern College adapted this College Affairs Branch urban program to train Native people to be employed by the Department of Indian Affairs and Northern Development offices, Hudson Bay stores and small businesses. Skills taught include typing, bookkeeping, basic accounting, stenography, and secretarial and clerical expertise. Short business and commerce courses are moved from one small community to another and assistance from the Department of Indian Affairs and Northern Development allows for low teacher-student ratios.

Cabinet Making
This forty-week program is offered at Northern College to train native students in cabinet making and fine woodworking. Graduates may find employment in custom furniture manufacturing, commercial cabinet making, and interior finishing.

Camp Cook – Food Services
Confederation College has developed a food services program to train people in camp cooking. The program helps to meet the needs of tourist and Ministry of Natural Resources camps, as well as providing Native people with the training to run their own goose camps and restaurants.

Carpenter, Construction Trades and Trades Helper
These urban programs have been modified to suit reserve locations, available materials, etc. Confederation College, Georgian College, Northern College have been prominent in this training area. The Apprenticeship Branch has made some concessions in the area of compulsory apprenticeship for carpenters, electricians and plumbers when the training is to be put to use on the isolated reserve in order to improve living conditions. If the Native person wishes to leave the reserve, he/she would have to register as an apprentice in a particular trade before these skills could be put to use. Abatements or credits would be granted for the training.

Community Improver Program
This program is offered by Confederation College and Northern College to help develop skills required to maintain the physical aspect of the community.

Day-care Nursing Aide
This course will be taught in Geraldton and Kenora and is designed to prepare students for work within Native communities.

Health Care Aide, Nursery Aide and Nursing Assistant
These programs are standard. Generally speaking, the Native person has to leave the reserve for training in order to have the necessary clinical facilities available. Upon graduation, employment may be available at hospitals located near the reserves.

Heavy Equipment Operator – Single Machine or Multiple Machine (eight pieces)
These courses are offered by Northern College to train Native students in the safe operation and maintenance of such equipment as bulldozers, loader scrapers, graders, tandem trucks and excavators. Graduates will find employment on roadbuilding, water main or sewer construction and earthmoving projects.

A heavy duty equipment operator program is also available through Confederation College.

Homemaker
Sponsored by the Department of Indian Affairs and Northern Development, this course is offered by Confederation College in many small Native communities. Areas of study include nutrition, home care, food preparation, and budgeting.

Logging and Small Sawmill Operator
This program is offered at Canadore, Confederation and Northern Colleges in accordance with need.

Maintenance Servicing
Confederation College offers this College Affairs Branch urban program to train Native people to maintain buildings, including schools, on the reserves.

Marine and Small Powered Equipment Mechanic
Confederation and Northern Colleges have offered this program extensively. Training has ranged on occasion from 16 weeks to the full 40 weeks. On occasion, the Department of Indian Affairs and Northern Development has provided tools and a workshop which are then left in place for the use of the graduates when the program has been completed. Emphasis generally has been on snow machine and outboard marine repair and maintenance. This program is offered in accordance with need.

Native Alcoholism Counsellor
Students will be taught to counsel Native people on the effects of alcohol on the community. This course is offered at Northern and Confederation Colleges.

At Northern, under the sponsorship of Canada Manpower and the National Native Alcohol and Drug Abuse Program, students are taught to counsel on the effect of drugs.

At Confederation, this is a three semester post-secondary program which is offered every other year. In alternative years, a five semester Native Community Worker program is available.

Paraprofessional Instructor
This program, offered at Northern College, is designed for paraprofessionals or assistants to the teacher. Much of the training is basically similar to a form of apprenticeship. A major advantage that the graduates have is fluency in Native languages and a knowledge of Native history.

No teaching certificate can be offered, although the Ministry of Education is prepared to consider the completion of this program as meeting part of the prerequisite for entry into a teacher's college.

Sawmill Operation and Maintenance
This course is offered by Confederation College in many small Native communities.

Small Boat Construction, Repair and Maintenance
Developed originally by Cambrian College for Manitoulin Island, this program has since been revised by the James Bay Educational Centre at Moosonee. Native craft construction is the main aspect, but the program also provides for the local repair of boats and thus holds down cost and time delays for such repairs.

Small Business Management
Confederation College offers a post-secondary program for small project developers to provide managerial skills required to design, organize and implement community programs.

Welding Operator
Northern College has redesigned the urban program to fit local conditions on the James Bay coast. Portable training facilities will be taken to the individual reserves to train Native people in welding.

Courses Available at Colleges of Applied Arts and Technology

• Applied Arts

Durham
Canadiana

• Continuing Education (Part-time – general interest)

Cambrian
(Birch Island)
Conversational Ojibway
Crafts workshops
Fitness for women
Leather work
Mathematics
Metrics
Piano and guitar
Sewing

(West Bay)
Basic cooking

(Wikwemikong)
Basic cooking
Piano and guitar
Sewing
School bus driver

Confederation
Conversational Ojibway
Cultural awareness
Supervisory skills

• Manpower Retraining, Industrial Training and Apprenticeship (Full-time – adult training)

Cambrian
(Birch Island)
Quilting (marketing)

(Gore Bay, Manitowaning)
Basic carpentry

(Sudbury)
Band planning training
Community health representative programs
Native transition
Training for National Native Alcohol and Drug Abuse program

(West Bay)
Academic upgrading
Carpentry and masonry
Native sweater production (Phase I-II)
Sheepskin coat making
Weaving (marketing)

(Sheshegewaning)
Carpentry and masonry

(Wikwemikong)
Carpentry and masonry, academic upgrading
Health care aide

Canadore
Academic upgrading
Basic employment training
Basic job readiness training
Carpentry (AOU)
Cottage industry (Native) duffle coat production
Industrial orientation
Introduction to non-traditional occupations
Marine and small engines mechanic
Native transition
Sawmill tradesman/woman
A full range of trades programs is available upon request.

(Bear Island and Okis)
Arts and Crafts Production Co-ordinator

Centennial
College preparatory program
English as a second language (ESL)
Preparatory education program (PEP)

Confederation
Academic upgrading
Building trades helper
Business and commerce
Community health worker
Community improver
Construction trades helper
Cutter and skidder operator
English as a second language
Food preparation (camps)
Heavy equipment operator
Homemaker
Life skills
Native alcoholism worker
Native community worker
Orientation to industrial employment
Sawmill operation and maintenance
Small business management
Tourist resort operator

Fanshawe
(Muncy)
Adult education program

Lambton
Academic upgrading (levels II, III and IV)
Band management

Mohawk
Academic and commercial upgrading
Construction trade helper
Welding

Northern
Academic upgrading
Alcohol and drug abuse counsellor training
Appliance servicing
Band management
Basic training for skill development (levels I and II)
Building custodian
Business and commerce
Camp cook – food services
Cabinet making
Construction labourers
Construction trades helper (plumbing and electrical)
Elementary carpentry
English as a second language
Forestry filers
Heavy equipment operator
Marine and snow vehicle maintenance
Masonry
Native arts and crafts
Native community health care worker
Native legal worker
Native recreation worker
Native social service worker
Nursing assistant
Oil burner service
Paraprofessional instructor
Silk screening
Small appliance service
Welder operator

Seneca
Seneca College offers courses and programs of interest to Native Students as well as having a Native Student Advisor, Mr. Bruce Berman (416-491-5050, ext. 695). Examples of these programs are:
Academic upgrading
Audio-visual technician
Coaching techniques (gymnastics and figure skating)
College preparatory
Dental assisting
Design arts
Early childhood education
Government administration
Law enforcement
Outdoor recreation technician
Parks operations and services
Recreation facilities administration
Recreation facilities management
Tourist industry administration
Various business programs
Various secretarial programs
Various technology programs

Sheridan
Academic upgrading
English as a second language

• Social services

Confederation
Native alcoholism worker
Native community worker
Cultural anthropology
Group home management
Native people and the law
Social support services

Courses Available at Ontario Universities

• Arts – Language

Lakehead
Elementary Ojibway or Cree, Algonquian, Iroquoian

Laurentian
An introduction to Ojibway
Advanced Ojibway
An introduction to Cree
Advanced Cree

Ottawa
Elementary Eskimo and Cree language courses

Trent
Oral Mohawk Oral Ojibway
Advanced oral Ojibway
Advanced oral Mohawk

• Geography

Windsor
Current problems of the Arctic environment

• Native Studies

Laurentian
Canadian Native people
Contemporary Native issues
Education, identity and Native culture
Native people and Canadian law
Native people and the Fourth World
Native people in the Americas: A Native perspective
Nature and man: a Native view
North American Native people: tradition and culture
La religion des amerindiens du Canada
Seeing with a Native eye
Selected themes

Nipissing University College
Teacher education: the education of Native Canadians - part I
Native classroom assistant Part I, II and III.
History: the Canadian Indian in historical perspective.

Trent
The Algonkian Identity
Education and the Native peoples
History of the Indians of Canada
Introduction to the contemporary situation of Native people in Canada
Iroquois culture and tradition
Law and the Canadian Indian
Native peoples in literature
Native societies of Canada
Politics and Native peoples

• Social Sciences

Trent
Native community development
Native studies methodology
Native studies field work
Social services and the Native people
Urbanization and the Native peoples

• Sociology and Anthropology

Western
Contemporary Natives of Canada

• Teacher Education

Lakehead, Laurentian, Western
See the Teacher Education section of this directory for details.

Further Information
For more detailed information on the programs listed in this section, check the individual college or university sections in this publication, consult the institutions' calendars which are available in secondary school guidance offices, or get in touch with the registrar's office.

Registered Private Vocational Schools

Introduction
In choosing an occupation or a profession, it pays to select the educational institution which can best prepare you to compete in the job market. In certain fields, private vocational schools in Ontario can often provide a suitable alternative to the wide range of training offered by colleges, universities, apprenticeship and other skills development programs.

This section will help you select the registered private vocational school that is best suited to your needs. A few minutes reading will help you to understand better what the schools offer, and what costs and contract requirements are involved. It is important that you carefully consider your own aptitudes and career goals *before* you enrol.

What are private vocational schools?
The registered private vocational schools offer training courses which deal with a single occupation or a number of related occupations.

These privately owned and operated schools of business, trades and technology offer training in secretarial and clerical work, bookkeeping, computer science, radio announcing, drafting, sales, fashion modelling, hotel-motel management, television electronics, court reporting, and other subjects. Courses may be provided in day or evening classes and, in many cases, by correspondence.

How are Private Vocational Schools Registered?
Private vocational schools offering courses in one or more of the training categories listed on the following pages are approved under The Private Vocational Schools Act.

This section of *Horizons* includes only the names of the schools which had applied for registration or re-registration for the year 1982 by December 31, 1981.

Supervision of the operation of registered schools includes the approval of all advertising copy, graduation requirements, and fees charged for the courses. It also indicates that teacher qualifications are in accordance with the Act and that the courses registered have been reviewed for their validity.

Approval is required of accommodation, equipment, lighting and heating facilities.

This section includes a *partial list* of courses conducted by the schools.

Information regarding individual courses may be obtained by communicating directly with the appropriate school listed.

Many separate courses are available in each subject area. Courses vary widely in what they cover. For example, one course in radio may teach you to repair radios; another may help you prepare for a position with a broadcasting company. It is suggested that you write to the schools for complete information, and then choose the particular course you want.

The fact that two or more registered schools offer courses with similar titles does not mean that these courses are of equal merit or will be of equal value to you. It *does* mean that each school truthfully describes its offerings and that the fees charged are considered reasonable for the facilities available, and for the instruction and services rendered.

The Private Career Education Council (PCEC) is a professional association of private vocational schools in Ontario. In the address section of the directory, the designation PCEC denotes member schools.

Further information may be obtained from
Superintendent of Private Vocational Schools
Skills Development Division
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8
(416) 965-5348

Do I have to be a high school graduate to enrol in a private Vocational School?
A high school diploma may be required for enrolment in certain courses. It may also be necessary to obtain employment, even if you have completed a training course designed to equip you with skills for the job.

Where can I obtain specific information about a particular course?
Write to the school listed in this section and request information relating to costs, course content, length of training, entrance requirements, and starting dates for courses.

Are Private Vocational School Graduates accepted by employers?
No training, be it in a college, university, or a private vocational school, guarantees employment. A good course should, however, provide you with the skills to meet the minimum employment standards of a particular occupation.

A number of trades and vocations are regulated under the Apprenticeship and Tradesmen's Qualification Act. Regulations to the Act require that all persons practicing any of 17 occupations hold a Certificate of Qualification, obtained through apprenticeship training. Apprenticeship is also offered in several hundred other occupations. Before selecting a training program, it is suggested that you read "Apprenticeship and You", which is available from your secondary school guidance counsellor or Communication Services Branch, Ministry of Colleges and Universities, 14th floor, Mowat Block, 900 Bay Street, Toronto M7A 1L2, (416) 965-6407.

What financial assistance is available?
A limited number of private vocational schools are eligible to participate in various government financial assistance programs for students. Normally this assistance will apply only to courses six months or longer, with an entrance requirement of secondary school graduation. For more complete details consult the Student Awards Branch, Ministry of Colleges and Universities, 8th floor, Mowat Block, Queen's Park, Toronto, Ontario M7A 2B4, or refer to the section on Financial Assistance for Students in this publication.

A Private Vocational School sales representative must be licensed.
Ontario law requires the school's agent to have a permit bearing the agent's name and the name of the school represented, when meeting a prospective student away from the school. The representative's permit is endorsed by the Minister of Colleges and Universities as well as the Superintendent of Private Vocational Schools. An owner of a school is not required to have a permit if he or she does not enrol or sign contracts away from the premises of the school. *Do not deal outside the school with a representative who does not have such a permit.*

What should I consider when enrolling in a Private Vocational School?
1. Make sure that the school is registered to operate in Ontario.
2. Be sure you can afford the total cost of enrolment fee, tuition, laboratory fees, books, transportation, room and board, etc.
3. Be realistic in evaluating your own aptitudes. Be sure you have the physical and mental qualities and educational background to profit from the course you are considering.
4. *Read the contract and be sure you understand it before you sign.* Don't be in a hurry. Your signature makes this contract legally binding. Get someone else to review the contract if you do not understand it in its entirety.

A school is responsible only for those conditions or terms which appear in the contract and descriptive literature, nothing more. Any promises or statements that are made by the representative and are not contained in the contract or catalogue may not be the responsibility of the school.

5. Be sure you understand exactly how much it will cost if you interrupt your training. *The refund policy must be clearly stated on the contract.*
6. Are you willing to devote the time and energy needed to succeed in the course?
7. If possible, visit a school, see the facilities and equipment and talk with currently enrolled students or graduates. *Talk with employers who have hired graduates.*

Key
Section 1 of this directory lists the courses available on a residence basis, full- or part-time. "Residence" means that you must attend formal classes.

Section 2 lists courses available by correspondence.

Section 3 lists the registered schools that offer the courses listed in the previous sections. The schools are listed in alphabetical order and are numbered for easy reference.

Should you be interested in either a residence or a correspondence course, turn to Section 1 or 2 respectively. The codes accompanying each course listing refer to the schools shown in Section 3 which offer that course.

Some correspondence courses require you to attend formal classes before completing the program. Further information is available from individual schools.

Section 1: Residence Courses

Courses	Schools
Accounting	15, 25, 84, 88, 92, 105
Aesthetician	14, 45, 57, 67, 72, 91, 109, 120, 129
Air—Mixed Gas Diving	19
Announcing (Radio and TV)	79
Audio Sound Productions	113
Bank Teller	15, 21, 39, 63, 71, 117, 127
Bartending	10, 22, 63, 116
Basic Electronics	23
Blueprint Reading	53, 68
Bookkeeping	21, 25, 84, 92, 101, 105
Business Administration	15, 71, 84, 88, 101, 105, 117, 127
Clerk	24, 39, 52, 60, 71, 84, 88, 101
Computer Engineering Technology	27
Computer Operator	23
Computer Maintenance Technology	23
Computer Programming	1, 6, 23, 25, 27, 39, 50, 51, 56, 127
Computer Technology	23, 96
Cosmetology	26, 50, 91, 125, 126, 129
Court Reporting	96
Culinary Arts	71
Data Entry Operator	15, 21, 25, 39, 50, 56, 63, 127
Data Processing	15, 21, 24, 39, 50, 63, 71, 76, 84, 88, 93, 105, 117, 118, 119
Dental Office Assistant	20
Dicta Typing	15, 24
Disc Jockey	29
Drafting	53
Draping (Fashion Design)	2, 37
Dressmaking and Design	2, 37
Estimating of Electrical Installations	94
Electric Heating Installation	94
Electrolysis	33, 34, 45, 64, 129
Electronics	1, 27, 95, 96
Engineering, Electrical	1
Engineering, Electronic	27, 95
Fashion Commentator	36
Fashion Design	37, 41, 54
Fashion Merchandising	38, 40, 41
Haute Couture Techniques	2, 37
Heavy Equipment Operating	31
Health Care Aide	49, 80, 86
Hotel Operation	20, 22
Hyperbaric Chamber (Decompression Chamber) Operator	19
Machine Transcription	92, 105, 128
Make-Up Artist (Stage, etc.)	3, 11, 32, 72, 91, 99, 103, 125, 126
Massage Therapy	14, 65, 67, 73, 110
Mechanic (Plumbing and Heating)	94
Medical Office Assistant	20, 105
Medical Office Practice	20, 105
Medical Records and Terminology	50, 105
Medical Transcription	50, 105
Millinery	2, 37
Modelling	8, 9, 11, 28, 32, 35, 36, 38, 40, 42, 43, 46, 58, 59, 66, 99, 100, 104, 107, 111, 112, 122, 123, 124, 125
Motel Operation	20
Office Practice and Management	92, 105
Pattern Drafting (Fashion)	2, 37
Pattern Making	2, 37
Photography (Modelling)	8, 9, 11, 28, 32, 35, 36, 38, 40, 42, 43, 46, 58, 59, 66, 99, 100, 104, 107, 111, 112, 122, 123, 124, 125
Private Investigation	16
Professional Sewing	2, 37
Receptionist	60, 71, 88, 101, 127
Sales (Dale Carnegie)	92
Secretary	15, 20, 21, 24, 39, 50, 52, 71, 76, 81, 84, 88, 101, 105, 127, 128
Secretary, Accelerated	60, 105
Secretary, Bilingual	84
Secretary, Executive	15, 71, 88, 105, 109, 127, 128
Secretary, Legal	15, 48, 50, 51, 60, 71, 84, 88, 90, 105, 117, 127, 128 136
Secretary, Medical	15, 48, 50, 51, 60, 71, 84, 88, 90, 105, 117, 128
Security Guard	16
Shorthand	90, 92, 105, 128
Stenography	24, 52, 60, 76, 84, 101, 105
Stenotypy	96
Systems Analysis and Design	1, 27, 50, 51
Tailoring	2, 37
Television Film Production	79
Tractor-Trailer Driver Training ("D" Licence)	4, 31, 75, 87, 89, 121
Travel Counsellor	15, 18, 20, 21, 63, 71, 101, 119, 127
Typing	6, 24, 71, 76, 92, 101, 105, 117, 127, 128
Underwater Photography/Television	19
Upholstery	85
Waiter/Waitress Training	115
Welding	13, 44, 53, 68, 69, 77
Word Processing	6, 15, 21, 24, 39, 48, 50, 63, 84, 93, 101, 105, 128

Section 2: Correspondence Courses

Courses	Schools
Accounting	12, 47, 55, 70, 78, 92
Aesthetician	57
Air-conditioning and Refrigeration	47, 55
Aircraft Mechanic	47
Announcing (Radio and TV)	79
Appliance Servicing	47
Art, Commercial	47
Art, Fundamentals	7, 47
Bartending	22, 63, 97
Blueprint Reading	47
Bookkeeping	47, 78, 92, 106
Business Administration	47, 78
Business Management	47, 55, 70, 106
Clerk	47, 70
Computer Programming	1, 47
Computer Technology	47, 96
Culinary Arts	47
Data Processing	47, 70
Dental Office Assistant	20
Dental Office Procedures	5, 47
Diesel Engine Repair	47
Dog Breeder (Canine Care)	102
Drafting	47, 55
Dressmaking and Design	47
Electrician	47
Electrolysis	33
Electronics	1, 47, 55, 74
Engineering, Chemical	47, 55
Engineering, Civil	47, 55
Engineering, Electrical	47, 55, 74
Engineering, Electronic	47, 55
Engineering, Industrial	47, 55
Engineering, Mechanical	47, 55, 74
Engineering, Professional Licence	47
Engineering, Structural	47, 55
Export-Import (Small Business Management)	106
General Record Keeping	12
Heating and Ventilation	47
Hotel Operation	17, 20, 22, 47, 55
Income Tax Preparation	47, 80
Interior Design	5, 47, 55
International Freight Forwarding	106
Investigation and Security	47
Journalism	47
Kennel Operator	102
Library Science	47
Management Accounting	47
Management, Small Business	47
Management, Traffic	47

Courses	Schools
Marketing	47
Mechanical Courses (Motor)	55
Medical Office Assistant	20, 21, 47, 106
Medical Office Practice	5, 47, 106
Medical Records and Terminology	5, 47, 106
Medical Transcription	5, 47, 106
Motel Operation	47, 55
Office Practice and Management	47, 92
Paste-Up (Graphic Arts)	47
Photography	47
Power Plant Engineering and Operation	47
Purchasing	47
Quality Control	47
Receptionist	47
Record Keeping	12, 70
Retailing	47
Salesmanship	47, 92
Secretary	12, 47, 55
Secretary, Executive	47, 78, 106
Secretary, Medical	47, 106
Shorthand	47, 70, 106
Stationary Engineer	47
Stenography	47
Stenotypy	5
Systems Accounting (Computer)	47
Systems Analysis and Design	1, 47
Telecommunications	47
Television Copy-writing	47, 79
Television Servicing	47, 55
Textiles (Fashion Design Merchandising)	47
Tractor-Trailer Driver Training	75, 87, 89
Travel Counsellor	17, 47, 97, 127
Typing	5, 47, 70, 92, 106
Upholstery	47, 108
Waiter/Waitress Training	97
Word Processing	70

Section 3: Schools

1. A.M.J. Electronic College
275 First Avenue
Ottawa K1S 2G7
Telephone: (613) 238-2800
Manager: Mr. A.M. Jotoff
PCEC

2. Académie des Couturiers Canadiens (L')
Mail only:
423 Sussex Drive
Ottawa K1N 6Z3
Training:
267 Dalhousie Street
Ottawa
Telephone: (613) 238-5233
Manager: Mr. R. Robinson

3. Academy of Professional Make-up Design Inc.
26 Cumberland Street
Suite 201
Toronto M4W 1J5
Telephone: (416) 967-1717
Managers: Mr. S. Marino/Ms. A. Lambrou

4. Ace Driver Training Inc.
Mail only:
7 Priscilla Lane
Hamilton L8E 3K9
Training:
132 Bancroft Street
Hamilton
Telephone: (416) 560-9122
Manager: Mr. P. Botermans

5. Allstate Technical Schools, Inc.
2221 Yonge Street
Suite B-100
Toronto M4S 2B1
Telephone: (416) 481-8578
Manager: Mr. A. Bhatti
PCEC

6. Anderkoch Institute of Data Processing
58 Queen Street South
Kitchener N2G 1V6
Telephone: (519) 579-1630
Manager: Mr. N. Andersen

7. Art Instruction Schools, Inc.
53 Highcroft Road
Barrie L4N 2X6
Telephone: (705) 726-8351
Manager: Mr. G. Worrall

8. Auston Professional Modelling of Toronto, Inc.
Auston Professional Modelling of Windsor, Inc.
920 Yonge Street
Suite 104
Toronto M4W 3C7
Telephone: (416) 961-9918
Manager: Mr. R. Parr

2853 Howard Avenue
Windsor N8X 3Y4
Telephone: (519) 969-8617
Manager: Mr. R. Parr

9. Barrett-Palmer Models International Incorporated
410 Queen Street
Ottawa K1R 5A7
Telephone: (613) 235-5145
Managers: Ms. E. Barrett/Ms. S. Palmer

10. Bartender Training School
270 Danforth Avenue
Toronto M4K 1N6
Telephone: (416) 461-1372
Manager: Mr. F. Viragh

11. Cameo School of Self-Improvement and Modelling Ltd.
379 Queen Street South
Kitchener N2G 1W6
Telephone: (519) 744-8989
Manager: Mrs. J. Heaton

12. Canada College
Mail only:
P.O. Box 293, Station M
Toronto M6S 4T3
Training:
39 Grenadier Heights
Toronto
Telephone: (416) 766-9456
Manager: Mr. D.A. MacLean

13. Canada Welding Trade School
26 Balsam Avenue North
Hamilton L8L 6Y2
Telephone: (416) 544-1284
Manager: Mr. J. MacDonald

14. Canadian College of Massage and Hydrotherapy
Mail only:
P.O. Box 983
Sutton West L0E 1R0
Training:
85 Church Street
Sutton
Telephone: (416) 722-3162
Manager: Mrs. E. Szasz
PCEC

15. Canadian Institute of Business Ltd.
210 Dundas Street
London N6A 5J3
Telephone: (519) 672-9520
Manager: Mr. R. Tahlan

16. Canadian School of Private Investigation and Security
3675 Keele Street
Suite 104
Downsview M3J 1M6
Telephone: (416) 638-2334
Manager: Mr. C. Franco

17. Canadian School of Travel
2221 Yonge Street
Toronto M4S 2B1
Telephone: (416) 481-9100
Manager: Ms. N. Wakens
PCEC

18. Canadian Travel School Corp.
Mail only:
33 Bloor Street East
Suite 203
Toronto M4W 3H1
Training:
Wilfrid Laurier University
Room P1023
Waterloo
Telephone: (416) 968-6333/968-6334
Manager: Mr. D.R. Cooper
PCEC

1039 Upper St. James Street
Suite 203
Hamilton
Telephone: (416) 968-6333/968-6334
Manager: Ms. L. McLeod
PCEC

19. Canadian Underwater Training Centre
417A Queen's Quay West
Toronto M5V 1A2
Telephone: (416) 363-6822
Manager: Mr. V.L. Pavuls
PCEC

20. Career Canada Ltd.
1039 Upper St. James Street
Hamilton L9C 3A7
Telephone: (416) 387-5214
Manager: Mr. J.M. McSween
PCEC

55 Queen Street East
Toronto M5C 1R6
Telephone: (416) 363-3721
Manager: Mr. J.M. McSween
PCEC

Billings Bridge Plaza
2315 Riverside Drive
Ottawa K1H 7X6
Telephone: (613) 523-8355
Manager: Mrs. Y. Watson
PCEC

21. Century Business Academy (West) Inc.
Mail only:
43 Eglinton Avenue East
Suite 606
Toronto M4P 1A2
Training:
1700 Wilson Avenue
Suite 208
Downsview
Telephone: (416) 249-2291
Manager: Mr. R. Clark

3025 Hurontario Street
Suite 301
Mississauga
Telephone: (416) 273-4780
Manager: Mr. L. Waddleton

22. Constellation Hotel School
The Constellation Hotel
900 Dixon Road
Toronto M9W 1J7
Telephone: (416) 675-1500
Manager: Mr. L.G. Hinds

23. Control Data Institute
50 Hallcrown Place
Willowdale M2J 1P7
Telephone: (416) 491-9191
Manager: Mr. J. Singer
PCEC

279 Laurier Avenue West
3rd Floor
Ottawa K1P 5J9
Telephone: (613) 236-8282
Manager: Mr. M. Jette
PCEC

24. Cooksville Business School
95 Dundas Street West
Mississauga L5B 1H7
Telephone: (416) 279-7980
Manager: Ms. G.L. Scanlan

25. D.M.D. Career Training Inc.
232 King Street North
Suite 103
Waterloo N2J 2Y7
Telephone: (519) 886-6511
Manager: Ms. D.M. Driscoll

26. Derma-Care Cosmetology Institute Ltd.
1290 Bay Street
2nd Floor
Toronto M5R 2C3
Telephone: (416) 964-6090
Manager: Ms. E. Rostas

27. DeVry Institute of Technology, a Division of Bell and Howell Ltd.
2201 Finch Avenue West
Weston M9M 2Z4
Telephone: (416) 741-9220
Manager: Mr. P.J. Dykstra
PCEC

28. Dorie Modelling Ltd.
28 Dundas Street East
2nd Floor
Mississauga L5A 1W2
Telephone: (416) 275-9604
Managers: Ms. D. Wimmer-Barnhart
Mr. R.E. Barnhart

29. Dynamic School for Mobile Disc Jockeys Company Inc. (The)
Mail only:
1624 Woodbine Heights Boulevard
Toronto M4B 3A4
Training:
813 O'Connor Drive
Toronto
Telephone: (416) 757-0641
Manager: Mr. M. Templeton

30. E.B.S. Services of Canada Ltd.
2696 Danforth Avenue
Toronto M4C 1L7
Telephone: (416) 699-0266
Manager: Mr. D. Hayden

31. Eastern Ontario School of Trucking Ltd.
Highway 44
P.O. Box 460
Almonte K0A 1A0
Telephone: (613) 256-2693
Manager: Mr. D. Sutherland
PCEC

32. Eleanor Fulcher Ltd.
667 Yonge Street
2nd Floor
Toronto M4Y 1Z9
Telephone: (416) 924-9633
Manager: Ms. E. Fulcher
PCEC

33. Electrolysis Educational Institute
Mail only:
130 Rosedale Valley Crescent
Suite 911
Toronto M4W 1P9
Telephone: (416) 977-7343
Manager: Ms. V.F.A. Bellefeuille
PCEC

34. Electrolysis School of Canada Inc.
6075 Yonge Street
Willowdale M2M 3W4
Telephone: (416) 221-3363
Manager: Mrs. M.E. Clark
PCEC

35. Elegance School of Self-Improvement and Modelling
Mail only:
15 Gustin Avenue
Lambeth N0L 1S0
Telephone: (519) 652-3157
Training:
190 Wortley Road
London
Telephone: (519) 472-4375
Manager: Mrs. P. Hugill

36. Elen Henderson Finishing and Modelling Agency Ltd.
1262 Don Mills Road
Suite 18-19
Don Mills M3B 2W7
Telephone: (416) 444-9571
Manager: Mrs. S. Cheatley

37. Ellen Peterson's Fashion Institute
Mail only:
P.O. Box 3271, Station D
Willowdale M2R 3G6
Training:
Towne & Countrye Square
Yonge Street and Steeles Avenue
Suite N-5
Willowdale
Telephone: (416) 222-4533
Manager: Mrs. E. Peterson
PCEC

38. Esprit School of Modelling Inc.
182 Woolwich Street
Guelph N1H 3V6
Telephone: (519) 836-5630
Manager: Ms. M.P. Hannan-Pate

39. Ethel Gould Business College
1304 Wellington Street
Ottawa K1Y 3B2
Telephone: (613) 729-8151
Managers: Mr. F.E. Kajfes
Mr. M.T. Valentine

40. Expressions by DSK
R.R. 1
Cambridge N1R 5S2
Telephone: (519) 622-2360
Manager: Mrs. D. Schmidt-Kirk

41. Fashion Institute of Canada (The)
Mail only:
2436 Yonge Street
Toronto M4P 2H4
Telephone: (416) 481-6477
Manager: Mrs. C. Norman

42. Flare School of Modelling and Self-Improvement
23 Parkside Drive
Newmarket L3Y 4R6
Telephone: (416) 898-1149
Manager: Ms. T. Chambers

43. Gemini School of Self-Improvement and Modelling, Ltd.
190 Victoria Street South
Kitchener N2G 2B9
Telephone: (519) 578-7520
Manager: Ms. C. Benn

44. General Welding School Ltd.
61-63 Jarvis Street
Toronto M5C 2H2
Telephone: (416) 363-7635
Manager: Mr. J.R. Lee

45. Gina's School of Aesthetics and Electrolysis
1803 Eglinton Avenue West
Toronto M6E 2H8
Telephone: (416) 789-2078
Manager: Ms. P. Lovering

6 Regina Road North
Waterloo N2J 2Z5
Telephone: (519) 886-2090
Manager: Mr. C. DeCicco

46. Gloria Moody Charm and Modelling School
Mail only:
1420 Isabella Street
Thunder Bay P7E 5B9
Training:
YMCA/YWCA
132 Archibald Street
2nd Floor
Thunder Bay
Telephone: (807) 622-9084
Manager: Mrs. G. Moody

47. Granton Institute of Technology
263 Adelaide Street West
Toronto M5H 1Y2
Telephone: (416) 364-5218
Manager: Mr. C.R.C. Hope
PCEC

48. Halton Business Institute
460 Brant Street
Suite 204
Burlington l7R 4B6
Telephone: (416) 637-3415
Manager: Mrs. D. Deacon

49. Health Care Vocational Centre
253 Danforth Avenue
2nd Floor
Toronto M4K 1N3
Telephone: (416) 497-1239
Manager: Ms. M. MacDonald

50. Herzig Institutes of Canada
396 Cooper Street
Ottawa K2P 2H7
Telephone: (613) 234-8099
Manager: Mr. L.H. Richie
PCEC

164 Eglinton Avenue East
Suite 310
Toronto M4P 1G4
Telephone: (416) 484-6996
Manager: Mr. J. McGinn
PCEC

51. Honeywell Institute for Continuing Studies
155 Gordon Baker Road
Willowdale M2H 3N7
Telephone: (416) 449-9022
Manager: Mr. R.B. Marriott

52. Huntsville Secretarial Teaching Service
19 Rogers Road
Huntsville P0A 1K0
Telephone: (705) 789-4267
Manager: Mrs. M. Cockram
PCEC

53. Institute of Technical Trades Ltd.
734 Kipling Avenue
Toronto M8Z 5G5
Telephone: (416) 255-2369
Manager: Mr. E.T. O'Shaughnessy
PCEC

54. International Academy of Merchandising and Design (Canada) Ltd.
31 Wellesley Street East
Toronto M4V 1G7
Telephone: (416) 922-3666
President: Mrs. J. Kadlec

55. International Correspondence Schools Canadian, Ltd.
6102 Burdett Drive East
Niagara Falls L2E 5G7
Telephone: (416) 354-4252
Manager: Mr. E. Tadeson
PCEC

56. International Data Processing Institute (Hamilton) Ltd.
139 King Street East
Hamilton L8N 1B1
Telephone: (416) 528-1108
Manager: Mr. W.J. Bodner
PCEC

57. International School of Haute Esthetique Edith Serei Inc.
181 Eglinton Avenue East
Toronto M4P 1J9
Telephone: (416) 482-2773
Manager: Ms. M. Kurbegovich

58. International Top Models
Head Office
709 Yonge Street
Toronto M4Y 2B4
Telephone: (416) 923-7200
Manager: Mrs. A. Bell

153½ King Street East
Hamilton L8N 1B1
Telephone: (416) 528-0021
Manager: Mrs. A. Bell

39 Water Street North
Kitchener N2H 5A6
Telephone: (519) 578-3880
Manager: Mrs. A. Bell

207 Dundas Street
London N6A 1G4
Telephone: (519) 438-4137
Manager: Mrs. A. Bell

185 Somerset Street West
Suite 201
Ottawa K2P 0J2
Telephone: (613) 230-9575
Manager: Mrs. A. Bell

59. Jean Banfield Charm and Modelling School
1884 Eglinton Avenue East
Suite 227
Scarborough M1L 2L1
Telephone: (416) 752-3331
Manager: Ms. K. Eluck

60. Johnson Business Academy Ltd. (The)
Tope Building
719 Main Street West
2nd Floor
Hamilton L8S 1A3
Telephone: (416) 523-4494
Manager: Mrs. M.R. Johnson
PCEC

61. Kanata Institute of Computer Science Inc.
10 St. Mary Street
Toronto M4Y 1P7
Telephone: (416) 960-8663
Manager: Mr. J. Gilbert

62. K.D. Crone and Associates Inc.
2121 Argentia Road
Suite 103
Mississauga L5N 1V8
Telephone: (416) 821-4780
Manager: Mr. K.D. Crone

63. Karen Hall Careers
Mail only:
10 Young Street
Kitchener N2H 4Y8
Training:
10 Young Street
Kitchener
Telephone: (519) 743-4691
Manager: Ms. K.J. Hall
PCEC

20 Hughson Street South
Hamilton
Telephone: (416) 824-5235
Manager: Ms. S. Mossindy
PCEC

111 Waterloo Street
London
Telephone: (519) 432-1020
Manager: Ms. K.J. Hall
PCEC

93 Dundas Street East
Suite 107
Mississauga
Telephone: (416) 276-2683
Manager: Mr. E. Bacon
PCEC

280 Albert Street
Suite 203
Ottawa
Telephone: (613) 235-0867
Manager: Ms. S. Mossindy
PCEC

1814-A Eglinton Avenue East
Suite 208
Scarborough
Telephone: (416) 751-3324
Manager: Mr. E. Bacon
PCEC

64. Kathleen's Electrolysis and Training Center
Westwood Mall
7205 Goreway Drive
Upper Level 1
Mississauga L4T 2T8
Telephone: (416) 677-5891
Manager: Ms. K. Miller

241 Dunsdon Street
Brantford N3R 6C8
Telephone: (519) 756-5411
Manager: Ms. S. Rachiero

65. Kikkawa Shiatsu School Inc.
Mail only:
234 Keele Street
Toronto M6P 2K3
Training:
2444 Bloor Street West
Toronto
Telephone: (416) 762-4857
Manager: Ms. S. Kikkawa

66. Lakehead Modelling School and Agency
176 Rupert Street
Thunder Bay P7B 3X1
Telephone: (807) 344-5973
Manager: Ms. P. Potts

67. Lam School of Advanced Esthetics
2130 Lawrence Avenue East
Suite 201
Scarborough M1R 2Z8
Telephone: (416) 757-3249
Manager: Mr. H. Lam

68. Lambton Technical School
Mail only:
1065 Brenchley Street
Suite 308
Sarnia N7S 1R6
Training:
115 Kendal Street
Point Edward
Telephone: (519) 336-3316
Manager: Mr. G. Chatzissavas

69. Lincoln School of Welding
R.R. 2
Trenton K8V 5P5
Telephone: (613) 392-4826
Manager: Mr. E. Jones
PCEC

70. Lorman Institute
738 Sheppard Avenue East
Willowdale M2K 1C4
Telephone: (416) 222-4242
Manager: Mrs. J. Loughran

71. Lougheed Business College Ltd.
445 King Street West
Kitchener N2G 1C2
Telephone: (519) 579-3160
Manager: Mr. L.G. Lougheed
PCEC

72. Marvel Beauty School
33 Bloor Street East
3rd Floor
Toronto M4W 3H1
Telephone: (416) 923-0991
Manager: Mr. H. Hlady

73. Massage Therapy Center of Canada
528 Bathurst Street
Toronto M5S 2P9
Telephone: (416) 961-5725
Manager: Mr. C. BelNevis

74. McGraw-Hill Continuing Education Center
330 Progress Avenue
Scarborough M1P 2Z5
Telephone: (416) 293-1911
Manager: Mr. S.J. Kenmuir
PCEC

75. Merv Orr's Transport Training School of Cambridge Inc.
Mail only:
P.O. Box 3186
Cambridge-Preston N3H 4S6
Training:
4230 Fountain Street North
Cambridge-Preston
Telephone: (519) 648-2519
Manager: Mr. M. Orr
PCEC

600 Simpson Street
Thunder Bay
Telephone: (807) 623-8686
Manager: Mr. R. Orr
PCEC

76. Metzler Business School
Mail only:
P.O. Box 41
Kingston K7L 4V6
Training:
77 Brock Street
Kingston
Telephone: (613) 546-1254
Manager: Mrs. P. Owen
PCEC

77. Mountain School of Welding
1495 Upper James Street
Hamilton L9B 1K2
Telephone: (416) 383-7827
Manager: Mr. R. Jolley

78. National College
76 St. Clair Avenue West
3rd Floor
Toronto M4V 1N2
Telephone: (416) 925-9155/925-9238
Director of Education: Ms. G. McGowan

79. National Institute of Broadcasting
1055 Yonge Street
Suite 200
Toronto M4W 2L2
Telephone: (416) 921-7811
Manager: Mr. J.C. Dickins

80. New Skills Vocational School
2084 Danforth Avenue
Toronto M4C 1J9
Telephone: (416) 425-8242
Principal: Mrs. M. Christoff

81. Niagara Commercial College Ltd.
4509 Queen Street
Niagara Falls L2E 2L4
Telephone: (416) 356-3141
Manager: Mrs. A. Henderson

82. North American Correspondence Schools
7475 Sherbrooke Street West
Montreal H4B 1S4
Telephone: 1-800-361-0280 (toll free)

Ontario Branch
6102 Burdett Drive East
Niagara Falls L2E 5G7
Telephone: (416) 354-4252
Manager: Mr. E.J. Todeson

83. Officemation Word Processing School
Mail only:
1284 Wellington Street West
Ottawa K1Y 3A9
Training:
2249 Carling Avenue
Suite 314
Ottawa
Telephone: (613) 596-1281
Manager: Mr. J. Reed

84. Ontario Business College
54 Victoria Avenue
Belleville K8N 5E8
Telephone: (613) 962-0870
Manager: Mr. A. Greer
PCEC

Richmond Centre
54C Centre Street North
Oshawa L1G 4B4
Telephone: (416) 576-9175
Manager: Mr. L. Van Dewall
PCEC

447 Sussex Drive
Ottawa K1N 6Z4
Telephone: (613) 233-4791
Manager: Mr. P. Greer
PCEC

30 Elgin Street North
4th Floor
Sudbury P3C 5B4
Telephone: (705) 673-8213
Manager: Ms. P. Horgan
PCEC

1119 Victoria Avenue East
Thunder Bay P7C 1B7
Telephone: (807) 622-7061
Manager: Mr. G.E. Trawa
PCEC

85. Ontario School of Upholstery
90 Basaltic Road
Maple L0J 1E0
Telephone: (416) 661-9247
Manager: Mr. J.A. Smith

86. Oscilla Institute for Health Personnel
428A Parliament Street
Toronto M5A 3A2
Telephone: (416) 960-1810
Manager: Mrs. V. Tensinco

131 John Street South
Hamilton L8N 2C3
Telephone: (416) 329-4507
Manager: Mr. F. Tensinco

87. P.T.L. Truck Driving School
2015 North Talbot Road
Windsor N9A 6J3
Telephone: (519) 737-6335
Manager: Mr. H. Plante

88. Park Business College
139 King Street East
Hamilton L8H 1B1
Telephone: (416) 522-5500
Manager: Mrs. J. Bodner
PCEC

89. Participation Transport Training Centre Ltd.
480 Lakeshore Boulevard East
Toronto M5A 1C3
Telephone: (416) 363-8031
Manager: Mr. G. Gibson

90. Pathfinder Business College
1 Elmhurst Avenue
North York M4L 3R6
Telephone: (416) 225-3737
Manager: Mrs. J. des Santos

91. Pebec School of Esthetics and Cosmetology
209 John Street
London N6A 1N9
Telephone: (519) 432-7162
Manager: Mr. L. Buijs

92. Practical Business Institute (The)
Mail only:
3038A Bloor Street West
Toronto M8X 1C4
Telephone: (416) 239-9919
Manager: Mr. M.G. Nola

93. Professional Word Processing
59 Main Street North
Suite B-2
Markham L3P 1X7
Telephone: (416) 294-4796
Manager: Mr. P. Purcell

94. Progressive Estimating (Vocational School) Ltd.
Mail only:
78 Deveron Crescent
London N5Z 4B5
Training:
YMCA/YWCA
1050 Hamilton Road
London
Telephone: (519) 681-8841
Manager: Mr. D.L. Jenkins

95. Radio College of Canada
243 College Street
Toronto M5T 2Y1
Telephone: (416) 598-4004
Manager: Mr. H.J. Nichol
PCEC

96. Radio Electronic Television School
2057 Danforth Avenue
Toronto M4C 1J8
Telephone: (416) 698-5287
Manager: Mr. J.D. Hatch
PCEC

97. Rapid Results School
74 Palmdale Drive
Scarborough M1T 3M7
Telephone: (416) 496-2756
Manager: Mr. M.H. Mohamed

98. Retter Business College
120 Eglinton Avenue East
Suite 215
Toronto M4P 1E2
Telephone: (416) 481-7111
Manager: Mr. B. Retter

99. Rita Mansfield Agency Modelling and Finishing School
130 Slater Street
Suite 950
Ottawa K1P 6E2
Telephone: (613) 238-2641
Manager: Ms. R. Mansfield

100. Runway Model Training Centre
57 Simcoe Street South
Oshawa L1H 4G5
Telephone: (416) 579-6237
Manager: Mr. D. Brown

101. St. Catharines Business College
124 Geneva Street
St. Catharines L2R 4N5
Telephone: (416) 685-9421
Manager: Mrs. B. Young
PCEC

31 West Main Street
Welland L3C 4Z5
Telephone: (416) 735-6180
Manager: Mrs. B. Rawlings
PCEC

102. School of Canine Science (The)
4981 Appleby Line
R.R. 6
Milton L9T 2Y1
Telephone: (416) 335-8093
Manager: Mrs. C. Gardiner

103. School of Makeup Art Ltd. (The)
1290 Bay Street
Suite 3
Toronto M5R 2C3
Telephone: (416) 961-1300
Manager: Ms. Y. Bussin

104. Select Models
158 King Street
St. Catharines L2R 5J4
Telephone: (416) 684-2258
Manager: Ms. C. Etzl

105. Shaw Central College
2436 Yonge Street
Toronto M4P 2H4
Telephone: (416) 481-6477
Manager: Mr. L.H. Porter
PCEC

106. Shaw Home Study College
2436 Yonge Street
Toronto M4P 2H4
Telephone: (416) 481-6477
Manager: Mr. D.R. Shaw

107. Stevens Finishing School of Hamilton
First Place
350 King Street East
Suite 207
Hamilton L8N 1C2
Telephone: (416) 528-5901
Manager: Ms. P. Fisher

108. Students School of Custom Upholstery
495-97 Champagne Drive
Downsview M3J 2C6
Telephone: (416) 633-5552
Manager: Mrs. A. Shapiro

109. Sudbury School of Esthetics
945 Barrydowne Road
Sudbury P3A 3T9
Telephone: (705) 560-6602
Manager: Ms. Y. St. Onge

110. Sutherland-Chan School and Teaching Clinic
732 Spadina Avenue
Toronto M5G 2T9
Telephone: (416) 366-1712
Manager: Ms. G. Chan

111. Suzanne's Modelling Agency
298 Elgin Street
Suite 104
Ottawa K2P 1M3
Telephone: (613) 232-5397
Manager: Ms. S. Morrison-Tyrell

112. Sylvia Reiser Modelling and Self-Development School
35 Geneva Drive
Hamilton L9C 3Z4
Telephone: (416) 389-1455
Manager: Mrs. S. Reiser

113. Tamiro Consultants Inc.
278 Jane Street
Toronto M6S 3Z2
Telephone: (416) 763-1131
Manager: Mr. T. Shelton
PCEC

114. Technitrol Professional Services Inc.
7290 Torbarn Road
Suite 15
Mississauga L4T 3H8
Telephone: (416) 677-4123
Manager: Mr. G. Rosenzweig

115. Tips School of Serving Inc.
Peter McGregor Tower
21 King Street
Suite 111
London N6A 5M3
Telephone: (519) 672-2640
Manager: Mr. M. Orr

116. Toronto Bartenders Training School
617-A Bloor Street West
Toronto M6G 1K8
Telephone: (416) 531-3027
Manager: Mr. R. Robinson

117. Toronto School of Business
165 Dundas Street West
Mississauga L5B 2N6
Telephone: (416) 273-7706
Manager: Mr. M. Damelin

2432 Eglinton Avenue East
Suite 6
Scarborough M1K 2P8
Telephone: (416) 288-5333
Manager: Mr. B. Yenovkian

335 Yonge Street
Toronto M5B 1S1
Telephone: (416) 977-9991
Manager: Mrs. M. Barnett

5592 Yonge Street
Willowdale M2M 5S2
Telephone: (416) 221-4386
Manager: Mr. A. Ebedes

118. Toronto School of Floral Design
2628 Yonge Street
Suite 2
Toronto M4P 2J4
Telephone: (416) 482-3003
Manager: Mrs. M. Kruchak

119. Travel Training Career Centre Ltd.
65 Hartsdale Drive
Weston M9R 2S8
Telephone: (416) 622-1075
Manager: Ms. L. Blazik

120. Triad Centre of Progressive Aesthetics
208 Bloor Street West
Toronto M5S 1T8
Telephone: (416) 961-3030
Manager: Ms. J. Robinson

121. Tri-County Vocational Driver Training
300 Colborne Street East
Brantford N3S 3M9
Telephone: (519) 756-5552
Managers: Mr. J. Wynia/Mr. G. Edler
PCEC

650 King Street East
Kitchener N2G 2M3
Telephone: (519) 744-7521
Managers: Mr. J. Wynia/Mr. G. Edler
PCEC

122. Universal Mannequenn Fashion School and Model Agency
463 Richmond Street
London N6A 3E5
Telephone: (519) 673-1234
Managers: Mr. G. Georgopolous/
Mrs. D. Georgopolous

123. Upper Lakes Pre-Sea Training
49 Jackes Avenue
Toronto M4T 1E2
Telephone: (416) 920-7610
Manager: Mr. E. Chudeck

124. Verma Williams
2011 James Street
Suite 1
Burlington L7R 1H1
Telephone: (416) 632-1065
Manager: Mrs. V. Williams

125. Versailles Academy of Make-up Arts and Sciences
35 O'Connor Street
Suite 203
Ottawa K1P 5M4
Telephone: (613) 235-1825
Manager: Ms. D. MacIntosh
PCEC

126. Visage School of Cosmetic Artistry
Mail only:
3979 Chesswood Drive
Downsview M3J 2R8
Training:
Limeridge Mall
999 Upper Wentworth Road
Hamilton
Telephone: (416) 385-4951
Manager: Ms. S. Rosenshein

Pen Centre
Glendale Avenue
St. Catharines
Telephone: (416) 684-6041
Manager: Ms. L. Quesnell

134 Yorkville Avenue
Lower Level
Toronto
Telephone: (416) 928-0606
Managers: Ms. C. Baker/
Mr. G. Fruchtman

127. Westervelt Business School Ltd.
190 Wortley Road
London N6C 4Y7
Telephone: (519) 679-0780
Manager: Mr. L.G. Lougheed
PCEC

128. Willis Business College Ltd.
85 O'Connor Street
Ottawa K1P 5M6
Telephone: (613) 233-1127
Manager: Mrs. M.A. Service
PCEC

129. Zehava School of Esthetics and Cosmetology
4544 Dufferin Street
Unit 5
Downsview M3H 5X2
Telephone: (416) 633-6330
Manager: Mrs. Z. Saarony
PCEC

Study Opportunities for Senior Citizens

• General Information

Universities
Both regular and part-time university study is open to senior citizens and nearly all universities offer free tuition. There are no admission requirements specific to senior citizens except proof of age. Several universities admit, as senior citizens, students who are at least 60 years of age, but most require proof that the student is 65 years of age or over. The student must be a Canadian citizen or permanent resident.

Senior citizens are normally admitted as mature students. Those who wish to enter a program of study leading to a degree must demonstrate the academic ability required to satisfactorily complete university level courses. Most universities set a one-year period of probation for assessment of this academic ability. General aptitude tests may also be required.

The majority of senior citizens enrolled in Ontario universities are taking part-time studies for personal interest.

Since tuition is waived for senior citizens, entry to courses which are restricted in number may be denied in some instances. Such courses are generally career-oriented and are usually of little interest to senior citizens. In all other respects, senior citizens enjoy the same privileges and are governed by the same regulations as regular students.

Special Programs
Ryerson provides seniors with personalized assistance in selecting courses and in registration. Trent University offers counselling for senior citizens through its college of part-time studies, Julian Blackburn College, as well as offering free tuition in credit courses for seniors over 60. For a nominal fee, Laurentian University offers some non-credit courses specifically designed for the over 50's and free tuition in credit courses for seniors over 60. Bursaries equivalent to tuition are available at the University of Western Ontario in an undergraduate faculty or in the faculty of graduate studies. As well, Western's Mature Student Advisor helps organize special programs and social events for senior citizens. At the University of Waterloo, bursaries equivalent to tuition are awarded to all individuals 60 years of age or over. A number of credit courses and public lecture series are offered by the university at various off-campus locations, and senior citizens are invited to attend. The UW Mature Student Services Co-ordinator offers programs and services for all mature students, including seniors.

Colleges of Applied Arts and Technology
Most of Ontario's colleges of applied arts and technology offer post-secondary credit courses through their Departments of Continuing Education or Extension to senior citizens for a nominal fee of $5 or $10 per course. There are no specific admission requirements and senior citizens are normally admitted under the mature students category. They are generally expected to meet normal academic standards and to be responsible for any incidental course fees which may be incurred for materials, books, labs, etc.

Reduced fees for both full- and part-time studies by senior citizens are offered by Cambrian, Canadore, Conestoga, Confederation, Durham, Fanshawe, George Brown, Humber, Northern, St. Clair, St. Lawrence, Sheridan and Sir Sandford Fleming colleges. Niagara College offers reduced fees for senior citizens for part-time studies only. The remainder of the colleges do not waive normal fees for senior citizens who wish to study as full-time students. Colleges may differ somewhat in their admission regulations; prospective students are advised to check with the institution they want to attend.

Special Programs
Humber College offers an extensive variety of specialized courses for senior citizens through its Third Age College. Courses dealing with retirement planning and the problems of retirement are available at Canadore, Centennial, Durham College Conference Centre, Loyalist, Mohawk, Cambrian College, Canadore College, Sault College, Seneca College, and Sheridan College offer courses of interest to senior citizens at off-campus locations. Lambton College offers the Actively Retired Citizens Program (ARC).

• Further Information
The following may be contacted for further information on programs and facilities for senior citizens.

Universities
Admissions Officer
Brock University
St. Catharines, Ontario L2S 3A1
Telephone (416) 688-5550

School of Continuing Education
Carleton University
Rm. 302, Administration Building
Ottawa, Ontario K1S 5B6
Telephone (613) 231-6660

School of Part-time Studies and Continuing Education
University of Guelph
Guelph, Ontario N1G 2W1
Telephone (519) 824-4120

Assistant Registrar, Continuing Education
Lakehead University
Thunder Bay, Ontario P7B 5E1
Telephone (807) 345-2121 ext. 210

Director, Continuing Education
Laurentian University
Sudbury, Ontario P3E 2C6
Telephone (705) 675-1151 ext. 500

Office of the Registrar
Nipissing University College
P.O. Box 5002
Gormanville Road
North Bay, Ontario P1B 8L7
Telephone (705) 474-3450 ext. 2293

Associate Registrar (Admissions)
McMaster University
Hamilton, Ontario L8S 4L8
Telephone (416) 525-9140 ext. 4796

Registrar (Admissions)
University of Ottawa
Ottawa, Ontario K1N 6N5
Telephone (613) 231-3930

Admissions Officer
Part-time Studies
Queen's University
Kingston, Ontario K7L 3N6
Telephone (613) 547-3283

Office of Admissions
Ryerson Polytechnical Institute
50 Gould St.
Toronto, Ontario M5B 1E8
Telephone (416) 595-5027

Co-ordinator of Senior Citizens Program
Woodsworth College
University of Toronto
Toronto, Ontario M5S 1A9
Telephone (416) 978-2411

Director of Admissions
Trent University
Peterborough, Ontario K9J 7B8
Telephone (705) 748-1215

Office of Part-Time Studies and Continuing Education
University of Waterloo
Waterloo, Ontario N2L 3G1
Telephone (519) 885-1211 ext. 2000

Faculty of Part-time and Continuing Education
The University of Western Ontario
London, Ontario N6A 5B8
Telephone (519) 679-3632

Director of Continuing Education
Wilfrid Laurier University
Waterloo, Ontario N2L 3C5
Telephone (519) 884-1970 ext. 448

Director of Part-time Studies
University of Windsor
Windsor, Ontario N9B 3P4
Telephone (519) 253-4232 ext. 265

Director of Admissions
York University
4700 Keele St.
Downsview, Ontario M3J 1P3
Telephone (416) 667-2211

Colleges of Applied Arts and Technology
Dean, Continuing Education
Algonquin College
1385 Woodroffe Ave.
Ottawa, Ontario K2G 1V8
Telephone (613) 725-7279

Dean, Continuing Education
Cambrian College
1400 Barrydowne Rd., Station "A"
Sudbury, Ontario P3A 3V8
Telephone (705) 566-8101

Chairman, Part-time Studies
Canadore College
P.O. Box 5001
North Bay, Ontario P1B 8K9
Telephone (705) 474-7600 ext. 2388

Dean, Continuing Education
Centennial College
P.O. Box 631, Station A
Scarborough, Ontario M1K 5E9
Telephone (416) 694-3345

Director, Continuing Education
Conestoga College
299 Doon Valley Dr.
Kitchener, Ontario N2G 4M4
Telephone (519) 653-2511 ext. 223

Associate Registrar
Confederation College
P.O. Box 398
Thunder Bay, Ontario P7C 4W1
Telephone (807) 475-6110
(toll free for N.W. Ontario residents
1-800-465-6961)

Admissions Officer
Durham College
Simcoe St. N.
Oshawa, Ontario L1H 7L7
Telephone (416) 576-0210 ext. 262

Admissions Officer
Fanshawe College
P.O. Box 4005
London, Ontario N5W 5H1
Telephone (519) 452-4277

Registrar
George Brown College
P.O. Box 1015, Station "B"
Toronto, Ontario M5T 2T9
Telephone (416) 967-1212 ext. 258

Dean, Continuing Education
Georgian College
1 Georgian Dr.
Barrie, Ontario L4M 3X9
Telephone (705) 728-1951 ext. 299

Director, Admissions
Humber College
P.O. Box 1900
Rexdale, Ontario M9W 5L7
Telephone (416) 675-3111 ext. 219

Registrar and Director of Student Services
Lambton College
P.O. Box 969
Sarnia, Ontario N7T 7K4
Telephone (519) 542-7751 ext. 295

Dean of Continuing Education
Loyalist College
P.O. Box 4200
Belleville, Ontario K8N 5B9
Telephone (613) 962-9501 ext. 278

Dean of Continuing Education
Mohawk College
P.O. Box 2034
Hamilton, Ontario L8N 3T2
Telephone (416) 389-4461 ext. 280

Admissions Officer
Niagara College
Woodlawn Rd., P.O. Box 1005
Welland, Ontario L3B 5S2
Telephone (416) 735-2211 ext. 316

Director, Continuing Education
Northern College
Highway 101, P.O. Box 2002
South Porcupine, Ontario P0N 1H0
Telephone (705) 235-3211 ext. 233

Dean, Community and General Education
St. Clair College
2000 Talbot Rd. W.
Windsor, Ontario N9A 6S4
Telephone (519) 966-1656 ext. 434

Registrar
St. Lawrence College
2288 Parkedale Ave.
Brockville, Ontario K6V 5X3
Telephone (613) 345-0660

Admissions and Academic Records Office
Sault College
P.O. Box 60
Sault Ste. Marie, Ontario P6A 5L3
Telephone (705) 949-2050 ext. 359

Dean, Continuing Education
Seneca College
1750 Finch Ave. E.
Willowdale, Ontario M2J 2X5
Telephone (416) 491-5050 ext. 468

Assistant Registrar
Sheridan College
Trafalgar Rd.
Oakville, Ontario L6H 2L1
Telephone (416) 823-9730

Admissions Office
Sir Sandford Fleming College
526 McDonnel St.
Peterborough, Ontario K9J 7B1
Telephone (705) 743-5620

Selected Reference Publications

Some of these publications will be available in secondary school guidance offices, public libraries, and at college and university admissions offices and libraries.

Careers

Career Information: A Bibliography of Publications about Careers in Canada $17.50
A comprehensive list of Canadian career materials. For information on availability and prices contact
Guidance Centre
Faculty of Education
University of Toronto
252 Bloor St. W., Suite 4-299
Toronto, Ontario M5S 2Y3

Career Selector Free
Data on over 150 careers – nature of work, training, qualifications, remuneration, etc.
Women's Bureau
Ministry of Labour
400 University Avenue, 15th floor
Toronto, Ontario M7A 1T7

Careers Canada $1 per booklet
A series of booklets on career planning for selected occupations. Each family of occupations, such as health or transportation, has its own booklet. For a list of booklets available see your high school counsellor, your local Canada Employment Centre, or contact
Occupational and Career Analysis and Development Branch
Canada Employment and Immigration Commission
Place du Portage
Ottawa, Ontario K1A 0J9

Careers Ontario
A series of provincially oriented leaflets providing information on approximately 670 careers. See your high school guidance counsellor, or contact your local Canada Employment Centre.

*Health Careers: Educational Requirements and Program Locations** $2
A booklet listing the entrance requirements, length and location of programs leading to health careers in Ontario.
Ontario Hospital Association
150 Ferrand Drive
Don Mills, Ontario M3C 1H6

Jobs for Your Future $1.50
An information booklet on how to select, qualify for, and obtain the career that's right for you.
Bridging the Gap
155 College St.
Toronto, Ontario M5T 1P6

Occupational Information Monographs
$1.10 per leaflet, $82.50 for complete set
Request free checklist of leaflets on some 200 careers.
Guidance Centre
Faculty of Education
University of Toronto
252 Bloor St. W., Suite 4-299
Toronto, Ontario M5S 2Y3

*Prices subject to change

Skills at Work Free
Six interviews with apprentices, journeymen and employers which examine the opportunities available in the skilled trades.
Communication Services Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2

Student Guidance Information Service (SGIS)
Information on approximately 1 000 occupations and the educational requirements for these occupations is available to students in Grades 7 to 13 in all publicly supported schools in Ontario. See your guidance counsellor for assistance.

Education
*Accredited Institutions of Postsecondary Education** $13.50 (U.S.)
Annual listing of accredited colleges and universities in the United States.
American Council on Education
One Dupont Circle, N.W.
Washington, D.C. 20036

College and University Programs in Canada
Copies of this publication are available for reference purposes in high school guidance offices, public libraries and Canada Employment Centres.

Commonwealth Universities Yearbook 1982 $125 (prepaid)
A directory to the universities of the Commonwealth and the handbook of their Association.
Association of Universities and
Colleges of Canada
Publications Department
151 Slater St.
Ottawa, Ontario K1P 5N1

*Directory of Canadian Universities** $10 (prepaid)
Basic information on 70 universities and their affiliated colleges; a listing of research institutes; a comprehensive table of university programs.
Association of Universities and
Colleges of Canada
Publications Department
151 Slater St.
Ottawa, Ontario K1P 5N1

*Higher Education in the United Kingdom 1980-82** $17.10
A handbook for students from overseas and their advisers.
Academic Press Canada Limited
55 Barber Greene Road
Don Mills, Ontario M3C 2A1

*Peterson's Annual Guide to Undergraduate Study** $13 (U.S. prepaid)
Complete information on universities in Canada and the U.S. including charts of programs, financial aid and entrance requirements.
Book Order Department
Peterson's Guides
Box 2123
Princeton, New Jersey 08540

Regional Schools for Nursing Assistants Free
A brochure describing the functions of the Registered Nursing Assistant as well as the admission requirements and selection procedure for students who wish to enter the nursing assistant program in Ontario.
Communication Services Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2

*Spectrum** $4.50
Basic information on colleges, universities and other education in Ontario.
Guidance Centre
Faculty of Education
University of Toronto
252 Bloor St. W., Suite 4-299
Toronto, Ontario M5S 2Y3

Tour d'horizon Gratuit
Guide de l'éducation postsecondaire en Ontario à l'intention des Franco-Ontariens – conditions d'admission, droits de scolarité, cours dispensés, etc.
Direction des Communications
Ministère des Collèges et Universités
Édifice Mowat, Queen's Park
Toronto, Ontario M7A 1L2

Financial Aid
The following information is available free from
Student Awards Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 2B4

Canada Student Loans Plan
Bilingual brochure outlining federally guaranteed loans for post-secondary students.

Financial Assistance for Students
Bilingual folder outlining the grants, loans, bursaries, fellowships and scholarships available to Ontario post-secondary students.

Ontario Special Bursary Program
A bilingual brochure outlining provincial assistance for part-time students who are receiving social assistance, are unemployed, or have a low family income.

Ontario Student Assistance Program
A booklet outlining provincial and federal financial assistance available to Ontario post-secondary students. Available in English or French.

Second Language Bursary and Fellowship Programs
Brochures and applications for a variety of assistance programs to encourage minority language teaching and study.

*Prices subject to change